

EXECUTIVE OFFICE

OFFICE OF THE DIRECTOR

Director John Frampton participated by conference call and DNR Board Members attended the Senate Fish, Game and Forestry Committee meeting, at the Committee's request, on February 1. Acting Director Alvin Taylor participated in the Law Enforcement Advisory Committee meeting at the Webb Wildlife Center in Garnett. Chief of Staff Don Winslow attended the House Wildlife Subcommittee meeting that morning and later that day met with IT staff for a discussion of agency conversion to the Oracle system. Mr. Winslow chaired Frampton Retirement Committee meetings on February 1, 14 and 21 in preparation for the event on February 22.

On February 2, Col. Taylor and Mr. Winslow attended the Heritage Trust Advisory Committee meeting in Columbia. Later that day, Col. Taylor met with Representative Elizabeth Munnerlyn, at her request, to discuss constituent and legislative issues. Mr. Winslow also met with DNR staff and Dick Byrd for a discussion of the Dorchester Shooting Range.

Mr. Frampton attended Upstate Forever's Forever Green Awards Luncheon on February 2 at the Embassy Suites in Greenville, at which time he was recognized and received their "Public Servant of the Year" award. From Greenville, Mr. Frampton traveled to Las Vegas, Nevada, where he participated in the Safari Club International Annual Convention on February 3-4.

Col. Taylor spent Sunday, February 5, with Officer Daniel Baker's family and attended the funeral of Officer Baker's father in Hartsville. On February 6, Col. Taylor met with Deputy Directors Boyles and Cope in Charleston to discuss future plans and activities, and later met with a reporter from the Post & Courier, at his request, for an interview on his selection as Director.

Mr. Frampton participated in the Atlantic States Marine Fisheries Commission meeting in Alexandria, Virginia, on February 7-8. While in Alexandria, Mr. Frampton attended the Congressional Sportsmen's Caucus Reception in Washington on the evening of February 7. From Alexandria, Mr. Frampton traveled to Nashville, Tennessee, where he attended the National Wild Turkey Federation's Annual Convention on February 9-12. During the convention, he gave the luncheon address and talked to the Technical Committee on February 9 as well as participated in a panel discussion on February 10 along with Dr. James Earl Kennamer.

Col. Taylor met with Mr. Winslow and the Deputy Directors on February 7. Col. Taylor attended the National Wild Turkey Federation Annual Convention in Nashville, Tennessee, on February 8-13. While in Nashville, Col. Taylor met with Ed Carter, Executive Director of the Tennessee Wildlife Resources Agency.

Breck Carmichael attended the monthly Engineering Section meeting on February 8 for project progress reports and updates. Mr. Winslow and Mr. Carmichael attending a meeting with Clemson University School of Agriculture, Forestry and Environmental Sciences (SAFES) Director Dr. Patricia Layton to discuss continued cooperative programs.

Mr. Frampton spoke at the U.S. Fish and Wildlife Service Retirees Reunion in Charleston and welcomed the group on February 13. He also participated in a conference call in preparation for the Wildlife and Hunting Heritage Conservation Council upcoming meeting. Mr. Winslow chaired the Rules and Regulations Committee meeting.

Col. Taylor met with members of the Coast Guard Auxiliary in his office in Columbia on the morning of February 14. Later that morning, he met with Senator Ronnie Cromer and Sterling Sadler of the SC Association of Conservation Districts, at Senator Cromer's request.

Mr. Frampton participated in the Wildlife and Hunting Heritage Conservation Council meeting in Washington, D.C. on February 14-15.

On February 15, Col. Taylor attended the Senate Fish, Game and Forestry Committee meeting. Later that day, he met with Governor Nikki Haley.

Mr. Carmichael provided a seminar on the mission of DNR and the economic value of natural resource related activities to students and faculty of the Clemson SAFES on February 15. Mr. Winslow attended the Lockhart Power 100th Anniversary kick-off reception that afternoon at the Lockhart Power Station in Lockhart.

Col. Taylor and Mr. Winslow participated in the DNR Board Meeting on the afternoon of February 17 at the Marine Center in Charleston, with Mr. Carmichael in attendance. Following the Board meeting, Col. Taylor and Mr. Winslow attended Malcolm and Caroline Rhodes' Oysters, Chili & Frogmore Stew in the Outdoor Classroom at the Marine Center.

Mr. Frampton met with Ben Gregg, Executive Director of the SC Wildlife Federation, in his office in Columbia on State Holiday, February 20.

On February 21, Mr. Frampton, Col. Taylor and Deputy Director Cope met with Craig LeSchack of Ducks Unlimited to discuss the DNR Canadian Project Proposal. Later that day, Mr. Frampton participated in a conference call with the North American Waterfowl Management Plan Committee. As a member of the SC Boundary Commission, Mr. Winslow attended a meeting with Alan Zupan of the SC Geodetic Survey to discuss the North Carolina/South Carolina

boundary dispute. Mr. Carmichael attended the South Low Country Focus Area Task Force meeting in Ridgeland as well as conducted inspections of two boating access facilities in Beaufort County for Land and Water Conservation Fund (LWCF) certification.

Mr. Frampton, Col. Taylor, Mr. Winslow and Mr. Carmichael participated in the Retirement Celebration at the Jamil Temple on the evening of February 22 to celebrate and honor Mr. Frampton's years of dedicated service to DNR; the event was well attended and successful.

Col. Taylor attended the funeral of the mother of Conservation Officer William LaDue at St. Phillips Church in Charleston on February 23.

Col. Taylor, Deputy Directors Boyles and Cope, and Mr. Meggie participated in a tour of the ACE Basin, including driving tours of Bear Island and Donnelley WMAs, with members and staff of the Senate Fish, Game and Forestry Committee and guests on February 24. Mr. Carmichael conducted a boating access inspection in Calhoun County for LWCF certification. On the evening of February 24, Mr. Frampton attended the 47th Annual SC Wildlife Federation Conservation Awards Banquet at the Clarion Hotel in Columbia, at which time he received their Lifetime Achievement Award.

On February 27, Mr. Carmichael met with DNR IT staff Patty Epley and Sam Hahn to discuss development of a DNR web page to address provisions for improved access to DNR properties under the Americans with Disabilities (ADA) Act.

Col. Taylor attended a breakfast meeting of the SC Law Enforcement Assistance Program (SC LEAP) in Lexington on the morning of February 28. That evening, Col. Taylor attended the SC Association of Conservation Districts (SCACD) Reception and Dinner event at Seawell's in Columbia.

Col. Taylor attended the Senate Fish, Game and Forestry Committee meeting on the morning of February 29 in Columbia. Later that day, Col. Taylor and Mr. Winslow attended the Land, Water and Conservation Districts Advisory Committee meeting in Columbia. Col. Taylor also met with Janice McCord and District Director Rick Adkins of Congressman Jeff Duncan's upstate office, at their request, for an introductory meeting and to discuss constituent and legislative issues.

Mr. Carmichael met with DNR Attorney Paul League and Bill Marshall of the LWC Division to discuss a Scenic River conservation easement issue.

During the month, Mr. Carmichael worked on compiling a list of DNR public accessible facilities and programs in preparation for a statewide Self Evaluation under the ADA, as requested by the Department of Interior. A potential transfer of property to the DNR was also researched and information provided for preparation of necessary documents for the Joint Bond Review Committee and Budget and Control Board, pending DNR Board approval of the transfer.

Marine Resources Division

Office of the Deputy Director

On February 2nd Mr. Boyles travelled to Santee Coastal Reserve with Cary Chastain and Kevin Kibbler to review renovations to the Lodge. On February 6th Mr. Boyles met with Alvin Taylor and Emily Cope to discuss plans for engaging Federal agencies in partnership with DNR. Mr. Boyles was in Alexandria, VA February 7 thru 9 to attend the Atlantic States Marine Fisheries Winter meeting. On February 16th Mr. Boyles met with Meadors Architects and Atrium Builders to discuss progress on the Eltzroth Building renovations. On February 17th Mr. Boyles hosted the February DNR Board meeting at the Marine Center in Charleston. On February 24th Mr. Boyles travelled to the ACE Basin aboard the E/V Discovery with Senators Ronnie Cromer, John Land, Chip Campsen, Danny Verdin and Greg Gregory as well as The Nature Conservancy staff and DNR staff for a field briefing. On February 28th Mr. Boyles took part in the Hollings Marine Lab External Review Panel in Charleston.

Marine Resources Research Institute (MRRD):

Grant Proposals

- *Submitted:* “RUI: Roles of Disturbance and Immigration in Shaping Benthic Microalgal Community Structure” (7/1/2012 – 6/31/2015). Dr. Greenfield (co-PI, Craig Plante, College of Charleston, lead) Biological Oceanography Program, NSF (through USC): The budget contained a contract to the SCDNR in the amount of \$14,500.
- *Submitted:* “Exploiting Cellular and Molecular Mechanisms for Practical Acceleration of Puberty and Enhancement of Fecundity in Farmed Fishes” to USDA-AIFA program. Eric Peatman (Auburn) PI, C. Sullivan (NCSU) co-PI, R. Chapman (SCDNR) co-PI. SCDNR Budget \$151,864
Awarded: “Observational and Modeling Studies to Benefit the Management and Selection of Borrow Sites for Beach Nourishment in South Carolina” Awarded as a subcontract from Coastal Carolina University as part of a Sea Grant proposal. Total SCDNR funding is \$24,198.
- *Submitted:* “Development of Economically Competitive, High Efficiency, Low-Polluting Aquaculture Feeds to Address Regulatory Issues Concerning Wastewater Discharge Permits”, J. Leffler (SCDNR), D. Bearden (NIST), K. Crooks (Zeigler Bros. Inc.), M. Denson (SCDNR), S. Snyder (Zeigler Bros. Inc.), T. Zeigler, (Zeigler Bros. Inc.), NOAA Sea Grant Aquaculture Program, \$497,032.
- *Submitted:* “Optimizing the NPDES Wastewater Permitting Process for Environmentally Sustainable Shrimp Culture Systems in the Southeastern United States”, J. Leffler (SCDNR). T. Samocha (Texas A&M), G. Treese (TX Sea Grant), C. Boyd (Auburn), C. Morris (Florida Organic Aquaculture), NOAA Sea Grant Aquaculture Program. \$493,157.
- *Submitted:* “Development of Economically Competitive, High Efficiency, Low-Polluting Aquaculture Feeds to Reduce Environmental Impacts of Effluent Discharges”, P. Sandifer (NOAA), S. White (NOAA), D.W. Bearden (NIST), K. D. Crooks (Zeigler Bros., Inc.), M.R. Denson (SCDNR), J.W. Leffler (SCDNR), S. Snyder (Zeigler Bros. Inc.), T. Zeigler, (Zeigler Bros. Inc.), NOAA Aquaculture Program – Internal Only Grant Program, \$98,431.
Submitted: “Production of Baseline Habitat Mapping of Priority Habitats for Reserves using Semi-Automated Classification Methodology”, Nina Garfield (ERD), Kiersten Madden (MANERR), Sandra Upchurch (ACENERR), Suzanne Shull (PBNERR), Matt Ferner (SFBNERR), NOAA-NERRS, \$9,000 to SCDNR.
- *Awarded:* “Enabling Coastal and Marine Spatial Planning in the South Atlantic through User Engagement, Comprehensive Data Management and Development of Spatial Decision Support Tools”. Subcontract received from SECOORA. Total SCDNR funding is \$60,015.

Publications

- Arendt MD, Boynton J, Schwenter JA, Byrd JI, Segars AL, Whitaker JD, Parker L, Owens DW, Blanvillain GM, Quattro JM, Roberts MA. Non-random spatial distribution of loggerhead sea turtles (*Caretta caretta*) in coastal waters of the Northwest (NW) Atlantic Ocean, and implications for management surveys. Submitted to Marine Ecology Progress Series
- Bergquist, D.C. R.F. Van Dolah, G.H.M. Riekerk, M.V. Levisen, S.E. Crowe. 2012 “The Condition of South Carolina’s Estuarine and Coastal Habitats During 2007-2008” Marine Resources Division Technical Report No. 106.

Presentations & Outreach

- Mike Arendt “Occurrence and demographic distributions of loggerhead sea turtles (*Caretta caretta*) on the inner continental shelf between Winyah Bay, SC and St. Augustine, FL (2000-2011)” to approximately 400 registrants at the Southeast Regional Sea Turtle Symposium on Jekyll Island, GA (1-4 February).
- Doll, C. and D.I. Greenfield (2012), “Determining factors that influence molecular quantification of the harmful raphidophyte *Heterosigma akashiwo* using a sandwich hybridization assay (SHA).” Poster presented at Ocean Sciences Conference.

- Greenfield, D.I., Bergquist, D., Brock, L.M., Felber, J., Keppler, C.K. and J. Ragland (2012) “Linking phytoplankton assemblage variability and nutrient loading with land use: A 3-year study of the Ashepoo- Combahee-Edisto (ACE) Basin, South Carolina, USA.” Poster presented at Ocean Sciences Conference.
- Peter Kingsley-Smith “*Marine invasive species in the southeast U.S.: lions and tigers, oh my!*” Seminar to the College of Charleston Department of Biology on February 13th that included information related to ongoing regional efforts to coordinate data collection on Indo-Pacific lionfish (*Pterois volitans*) and *P. monodon*.
- Arrington, D., J. Brunson, R. Shumate, A. Stokes, J. Leffler “Year-round production of native white shrimp (*Litopenaeus setiferus*) for the live bait market.” Presented at SC Fisheries Workers Association/SC Chapter of the American Fisheries Society Annual Meeting. February 15-16, 2012, Seabrook Island, SC.
- Tucker, C.R., A. Fornal, S. Upchurch, J.W. Leffler “ACE Basin National Estuarine Research Reserve (NERR) System-Wide Monitoring Program (SWMP).” Poster presentation at SC Fisheries Workers Association/SC Chapter of the American Fisheries Society Annual Meeting. February 15-16, 2012, Seabrook Island, SC.
- Upchurch, S. “GIS visualization of red drum (*Sciaenops ocellatus*) distribution in Combahee River and Winyah Bay Estuary.” Presented at SC Fisheries Workers Association/SC Chapter of the American Fisheries Society Annual Meeting. February 15-16, 2012, Seabrook Island, SC.
- Whitaker, D., L. DeLancey “Is climate change affecting brown shrimp abundance in South Carolina?” Presented at SC Fisheries Workers Association/SC Chapter of the American Fisheries Society Annual Meeting. February 15-16, 2012, Seabrook Island, SC.
- Leffler, J.W., J. Brunson, D. Arrington, R. Shumate “United States Marine Shrimp Farming Program 2011 Comparative Trial - Waddell Mariculture Center.” Presented at United States Aquaculture Society Annual Meeting. February 28, 2012, Las Vegas, NV.
- Schock, T.B., J.R. Duke, S. Newton, K. Brenkert, J. Brunson, J.W. Leffler, D.W. Bearden “NMR-Based Metabolomics: A Useful Diagnostic Tool for the Many Facets of Aquaculture.” Presented at United States Aquaculture Society Annual Meeting. February 29, 2012, Las Vegas, NV.
- DeLancey gave a brief status update at the annual SC Shrimper’s meeting.

Progress Report and Activities

Coastal Finfish:

SEAMAP and MARMAP: Staff continues to prepare for various sampling seasons (gag ingress, reef fish and coastal surveys, etc.). The first 3 weeks of the reef fish monitoring survey in April were cancelled as a result of the reduced MARMAP funding.

Marcel Reichert, Tracey Smart, Michelle Pate, Laurie DiJoy and Dawn Glasgow attended the external review workshop for the Fishery Marcel Reichert, Tracey Smart, Michelle Pate, Laurie DiJoy and Dawn Glasgow attended the external review workshop for the Fishery Independent Reef Fish Monitoring Review (MARMAP/SEAMAP/SEFIS) in Beaufort, NC, on Feb. 27-March 2. This external review was requested by the Director of the South East Fisheries Science Center (Dr. Bonnie Ponwith) as part of the periodic review process of these surveys. Marcel Reichert presented an overview of the MARMAP/SEAMAP Reef Fish Surveys, including some history, sampling methods, samples processing, data collection and processing, and data management and analyses. A review report is expected in March. Michelle Pate and Marcel Reichert attended SCS training in Norfolk, VA (Jan 30- Feb 3). The SCS is a new software package that will MARMAP will be using in conjunction with the South East Fishery Independent Survey project to record all filed sampling information during research cruises on board the *R/V Palmetto*.

SEDAR: Staff provided data and participated in the SEDAR 28 (cobia and Spanish mackerel) stock assessment Data Workshop (Feb. 6-10) in Charleston. DNR staff was generally well prepared for this workshop. Much progress was made in organizing, analyzing, and discussing various data sets, but a significant amount of work (mostly by other partners) still needs to be done prior to the assessment workshop on May 7-11 (Miami). Marcel Reichert participated in the workshop as a representative of the South Atlantic Fisheries Management Council’s Scientific and Statistical Committee.

Environmental Research:

Captain Sam’s inlet monitoring: Preliminary sampling of the piping plover feeding habitats on Kiawah and Seabrook was completed in early February. The Coastal Conservation League has a lawsuit in place challenging the Captain Sam’s Inlet relocation. Bob met with Dana Beach and Seabrook staff to discuss the issues and are working on some potential solutions.

Hilton Head/Bay Point Borrow area: A progress report on the Bay Point borrow site study is being prepared which will summarize findings from the pre-impact sampling period. Several environmental section staff and Dr. Ansley Wren from CCU completed the immediate post dredge sampling period for the Bay Point Borrow area and reference area. Three

staff have been recertified as DAN oxygen providers in preparation for some diving in the borrow and reference areas. Sediment and benthic samples have been processed through the October 2011 samples.

Hilton Head/Piping plover habitat monitoring: Staff completed the February piping plover habitat sampling. That completes our sampling until December of 2012. The samples will be processed over the next few months and the data will be provided to another contractor for analyses.

SERTC: Staff is compiling images and text for the Sargassum poster, and has begun creating a first draft. She attended part 2 of an Adobe In-Design Course needed to complete the poster layout.

SCECAP: The 2011 benthic samples have been sorted and identified. Initial analyses on data from the 2009-2010 sampling season have been completed.

Miscellaneous: ERS staff participated in two Crustacean Monitoring Section cruises to assist in fish identifications, and assisted in the helicopter survey of oyster beds.

Dr. Denise Sanger has accepted the position as the new Manager of the Environmental Research Section. She will begin working at the MRRI on April 16.

Algal Ecology:

Routine Monitoring and Fish Kill Responses (private contract & Center for Disease Control, CDC, project): No fish kills were reported during February.

Assessing Phytoplankton Responses to Nutrient Levels in SC Estuaries (EPA project): Staff completed all of the winter field sampling and experimentation. Staff also completed coordination of water sample retrieval with DHEC for the February SCECAP sampling for water quality analyses. M. Reed (graduate student, College of Charleston) has begun her proposal for her thesis, and she will focus her efforts on the field experimentation.

Adapting the Sandwich Hybridization Assay for Red Drum (Sea Grant) – We are still awaiting funds to conduct this research. However, Drs. Greenfield & Arnott began initial planning for the monthly sampling for red drum eggs, and an initial test sampling event was conducted. This test was successful, with only minor modifications to the protocol needed. Dr. Greenfield has also met with the student who will participate in this project, and she is going through the processes of getting access and approvals to work in HML.

Estuarine Finfish Research:

Striped Bass: Staff are continuing to genotype historic genetic samples for a temporal structure comparison across South Carolina with preliminary analyses beginning; genetic processing of the Jul-Nov 2012 samples from the Ashley River are nearly complete, as are the 2011 North Carolina samples. EFR and WFFD staff completed monthly electrofishing of Shultz Lake and freshwater sections of the Ashley.

Side-scan sonar equipment for habit mapping of the Ashley riverbed has been installed and tested. Test images were geoprocessed in GIS with good results. Complete mapping of the river is scheduled for next month.

Genetic Influences of Overfishing: For the red porgy project, staff are completing the genotyping of samples to evaluate the potential of latitudinal genetic structure within these reef fish, nearshore/offshore analyses are completed indicating no genetic partitioning along this gradient; for the red snapper project, otoliths from fish sampled during 1977-1985 (provided by Jennifer Potts at NMFS) are being genotyped.

Genetic Tool Development: Staff completed the initial data analyses for the red drum telomere aging project, statistical methods to optimize the relationship between telomere length and age are being evaluated. Staff completed the processing of the Atlantic sturgeon samples for the sturgeon telomere aging project and analyses are ongoing.

Cobia: Staff completed the genotyping and analyses of the SC 2011 cobia samples; which will be incorporated into the ongoing evaluation of stocking contribution and large-scale population structure. Additional 2011 samples have been received from Thailand and North Carolina are being processed. Staff are continuing to work on the data preparation for the cobia stock assessment (SEDAR 28).

Spotted Seatrout: Initial genetic structure analyses of North Carolina to Georgia samples suggest a clear stepping stone pattern of gene flow throughout the range, with significant genetic differentiation occurring at scales of approximately 300km. Therefore, conservative recommendations for future stocking of spotted seatrout include the maintenance of estuary-specific stocks. Staff are beginning to genotype samples to evaluate the effect of cold winters on genetic diversity. Staff have determined from experimental testing that sea trout do not survive below 4.0 degrees C. A second set of experiments is underway to determine whether temperature rate of change at sub-lethal temperatures may also affect survival during cold winters.

Weakfish Genetic Identification: Staff completed the development of genetic identification automated keys for the weakfish morphological identification verification project – which is capable of not only individual species identification, but hybrid identification as well; processing of historic samples to verify identifications continues and application of the identification key to those samples is ongoing.

Trammel and Electrofishing surveys: All February scheduled days for the SCDNR Electrofishing survey were completed successfully. All February scheduled days for the SCDNR Trammel Net survey were completed successfully. We covered two more strata than usual (9 in total) because of the addition of Port Royal Sound, which is sampled quarterly rather than monthly. We had volunteer assistants from Georgia DNR (who are in the process of setting up a trammel survey that will mirror ours), the Outside Hilton Head adventure guide company, and the Beaufort Coastal Conservation Association.

Genetics:

Gag MARFIN: Most of the effort this reporting period was focused on working on a semi-annual report (due March 1) for the genetic studies in gag grouper.

Shellfish Research:

SC Sea Grant Consortium Triploid Oyster Project: Benjamin Stone attended the North Carolina Aquaculture meeting Feb. 9th-11th. Final sampling was conducted at the Murrell Inlet grow-out site and further sites are expected to be completed next month. Protocols have been developed to conduct tissue weight measurements of oysters collected during the final sampling events. An annual progress report was submitted to South Carolina Sea Grant Consortium outlining the hatchery, nursery and grow-out phases completed for this project over the past year.

State Wildlife Grant restoration project: Staff developed an improved "thinset" cement treatment mixture that includes an acrylic adhesive for crab trap reef-building efforts planning for the 2012 season.

Office of Fisheries Management assistance: Several MRRRI section managers that serve on the Indigenous Shellfish Importation Committee met to review updates and amendments to the policy documents.

Saltwater Recreational Fisheries Advisory Council / Dingle-Johnson funding statewide oyster reef assessments: Helicopter flights were completed in Sewee Bay and Cape Romain Harbor (Feb 6th-7th). A procedure has been devised to use Coral Point Count software for estimating oyster density. Data continue to be processed, however preliminary examinations indicate that there is <5% difference in density estimations using photos taken at 500 ft above oysters flats compared to photos taken at 250 ft suggesting that greater areal coverage may be possible at a higher elevation without losing resolution on density assessments.

Southeast Aquatic Resources Partnership (NOAA): Crab trap posters requested information on abandoned and unwanted traps were put up at 12 different sites around Charleston County to increase public awareness of these restoration efforts. Crab trap-based oyster reef 'footprints' were collected at a site in the Ashley River via kayak, as well as at three sites in both the Dawhoo River and Leadenwah Creek. Benjamin Stone gave a presentation at the SCFWA conference on Seabrook Island on February 16th entitled "*CONSTRUCT – Creating oyster niche structures through restoration using crab traps.*"

Invasive species research: Additional tissue samples from Asian tiger shrimp (*Penaeus monodon*) were sent to the NOAA-NMFS laboratory in Beaufort, NC to be incorporated into the tissue repository for genetic analyses. Initial results from genetic approaches explored by the USGS laboratory in Gainesville, Florida were promising in terms of both microsatellites and single nucleotide polymorphisms (SNPs) that may be able to be used to answer questions regarding the geographic source of recent collections, the dynamics of recent invasive events, and the population structure of animals through the Gulf and Southeast Atlantic. Dr. Peter Kingsley-Smith gave a seminar to the College of Charleston Department of Biology on February 13th 2012 entitled "*Marine invasive species in the southeast U.S.; lions and tigers, oh my!*" that included information related to ongoing regional efforts to coordinate data collection on Indo-Pacific lionfish (*Pterois volitans*) and *P. monodon*.

Miscellaneous: The revised version of the Habitat chapter of the Comprehensive Wildlife Conservation Strategies document that Dr. Peter Kingsley-Smith contributed significant edits to update and improve (along with the Coastal Zone supplemental volume) has been circulated for final review. Several staff attended the South Carolina Seafood Summit, which included a presentation on the oyster reassessment surveys including aerial imagery, helicopter imagery, ground-truthing and substantial GIS efforts.

Sustainable Mariculture/Crustacean Monitoring

SCSGC Bait Shrimp: Submitted the annual report for the SC Sea Grant Commercialization of Bait Shrimp project. Staff participated in the 3rd annual SC Seafood Alliance meeting.

USMSFP Population Demographics study: Modifications to the four tank replicate raceway system and construction of a 48 flow-through aquarium system linked to the raceways, which is suitable for feed studies, have been completed. This study is evaluating different techniques for assessing the size of the shrimp population in zero visibility, biofloc-based shrimp culture.

Blue Crab Mariculture project: Two commercial crabbers have agreed to collect gravid blue crabs for our fecundity and larviculture work. Algae and rotifer production has been scaled up in preparation for crab larviculture.

ACE Basin National Estuarine Research Reserve: Staff attended the national NERRS Technician Training Workshop, February 7-9 in Pawley's island, SC. Staff is preparing the 2011 annual report for the System wide Monitoring Program (SWMP) YSI data collection, and is working on the final draft of the NERRS Standard Operating Procedures (SOP) manual for preparing land cover maps. Participated in developing a monitoring program for the proposed oyster farm in the ACE Basin.

Crustacean Monitoring: Trawl sampling at mid month continued to collect below average numbers of white shrimp, but this is much better than in 2011, when 0 shrimp were collected between mid Jan.-June due to cold water temperatures. Trawl catch of blue crab remains below average, but 2011 preliminary commercial landings were the best in a decade, and DNR fall pot survey was the highest since 2005. Staff participated in the 3rd annual SC Seafood Alliance meeting.

Horseshoe Crabs: Annual reports were submitted to ASMFC and to SC Sea Grant on Horseshoe Crab monitoring activities.

In Water Sea Turtle Project:

Arendt provided information regarding permits and funding to Ms. Caroline Pinckney to assist in her response to a Freedom of Information Act request received on 7 Feb.

Minorities in Marine and Environmental Sciences (MIMES) Program: A revised budget was submitted to the National Science Foundation to support the MIMES Program for the summer of 2012. Lara Brock and Dr. Peter Kingsley-Smith gave talks to promote the MIMES Program at the College of Charleston's South Carolina Alliance for Minority Participation (SCAMP) meeting on February 6th, at Benedict College on February 15th, and at Savannah State University on February 22nd. Applications for the summer 2012 program have started to arrive at an increasing rate in recent weeks.

Office of Fisheries Management (OFM):

Shellfish Management:

Commercial Management - No permit holders requested verification for legally required shellfish culture permit plantings during February. Through calendar year 2012, two permit holders have requested planting verification on 3 different permits with none completing planting quotas for 2012. A total of 341.8 U.S. bushels of shellfish seed, green oyster shell, clam cover or approved cultch, cultivation, or equivalent has been planted. The assessed planting quota for the state's 119 culture permits is 122,985.6 U.S. bushels after taking into consideration DHEC closures, permit cancellations, acreage reductions or increases, boundary modifications and approved variances. Shellfish seed may be planted throughout the calendar year, however by S.C. law (§ 50-5-940), cultch must be placed between 01 May and 31 August for credit.

Five requests for planting variances were approved this month. We received 1 culture permit application (denied) and 1 mariculture application (in process of approving). 1 culture permit was relinquished this month and 1 mariculture permit was relinquished this month. We amended five permits to include an additional co-permittee (all for the same permit holder).

Nancy Hadley attended a public hearing at Edisto which OCRM held to receive input on the application from OV Associates to conduct oyster mariculture in Fish Creek. Staff provided comment to Bob Perry to be included in the DNR's official response to the public notice about this proposal.

Ten culture permits were advertised as available. The notice was posted at all commercial license offices, at the Marine Permitting Office and on the DNR website. Additionally, the notice was posted to the Shellfish Growers Association listserv and mailed to organizations who had expressed interest.

Applications were received through March 5. The Shellfish Permit Committee will evaluate the applications and make a preliminary determination of who should receive these permit areas.

The Indigenous Importation Committee met to review the importation policy. Substantive changes include updating the disease criteria to include newly recognized diseases and diagnostic methods. We are seeking input from pathologists to assist in that process. We are also modifying the timelines for pathology reports and permit duration since the old timelines allowed only about a week's window to complete an importation.

Shell recycling and planting; recreational management

The bid for planting shell in Georgetown County was awarded to EH Clamboat. Planting will begin the second week in April in Oaks Creek in Murrells Inlet.

Potential planting sites were scouted in Charleston and Beaufort Counties and selections for 2012 planting completed.

Preparations are underway to make the push boat and barge ready for the summer planting season. This work will be primarily done by DNR staff. A diver has been hired to scrape the bottom of the push boat and barge of any fouling.

4,265 bushels of shell were recycled this month. Bins at Port Royal, Sol Legare Boat Landing, Ft. Johnson, Jessen Boat Landing in Ladson, and Mt. Pleasant were cleaned out this month.

Sam Bennett has resigned his hourly position and we will be replacing him as soon as possible.

Mitigation Projects

Annual progress reports for year one of the MacAlloy compensatory restoration project and year 4 of the SCSA mitigation were submitted this month. A letter was sent to SPA confirming our intention to renew our lease of the Veterans Terminal for the coming year. We also received confirmation (verbally at least) that we have permission to extend that lease agreement for up to four additional years.

The bid for transport and planting 37,500 bushels oyster shells for these Harbor projects was posted on the state procurement website for closed bids.

Data on three year old mitigation sites is continuing to be analyzed and will be presented in March at the National Shellfisheries Association meeting in Seattle, WA.

Monitoring

Recruitment trays were retrieved from Bohicket Creek, Bear's Bluff, Toogoodoo Creek, Shipyard Creek, Oaks Creek, Woodland Creek, and Hobcaw Creek. These trays have been deployed for approximately 11 months and are part of our annual effort to evaluate recruitment statewide. Efforts to collect and process recruitment trays will continue throughout March. Early indications are that this year will have exceptionally high recruitment and exceptionally high growth rates.

Grant activities

State Wildlife Grant and SCORE: Allie Kreutzer and Stephen Czwartacki worked with students from Mason Preparatory School and Ashley Hall to plant *Spartina* seeds for the From Seeds to Shoreline project.

Michael Hodges and Allie Kreutzer met with Al Stokes and representatives from Master Naturalist and Master Gardener groups at Waddell Mariculture Center. We have scheduled two build events with these groups in June as part of their effort to slow shoreline erosion at the Waddell Center.

We had six separate bagging events with 6th grade classes from Moultrie Middle School. Over those six days 259 students worked for 388 hours to create over 1700 shell bags. 15 students from the Students In Free Enterprise club at College of Charleston worked for 2 hours to create 60 recruitment trays to be deployed this spring.

Stephen Czwartacki trained 2 volunteers to monitor water quality at East Cooper Marina.

National Fish and Wildlife Federation - Allie Kreutzer met with Robert Wiggers and Jessica Tipton to outline the agenda for the Estuary 101 teacher workshop that will be held March 23rd at the SEWEE Education and Visitor Center.

Southeast Aquatic Resources Partnership-NOAA and Atlantic Coast Fish Habitat Partnership - Two bids were submitted for posting on the state procurement website, one for supply and delivery of 6,520 bushels of oyster shell and one for transport and planting of 6,520 bushels of oyster shells. Shells will be planted at 3 large-scale sites located in the ACE Basin.

Michael Hodges, Allie Kreutzer, and 2 volunteers moved 300 bags to Bennett's Point for deployment this summer. Baseline data was collected for potential build sites on Coosaw Cut. Stephen Czwartacki has set up 8 community restoration reef-building events for the ACE Basin region. These will fulfill obligations under two NOAA-SARP grants and the ACFHP grant. Safety Plans have been sent to all participating groups.

We are still waiting for grants administration to set up accounts so that we can utilize our second grant from NOAA-SARP.

Our ACFHP project "Shoreline and *Spartina* Marsh Stabilization along the Atlantic Intracoastal Waterway" was submitted to the National Fish Habitat Partnership's "Ten Waters to Watch" program.

Meetings and Collaborations

Staff attended the SC Seafood Summit sponsored by the Seafood Alliance and met with multiple industry participants. Nancy Hadley gave a presentation on the new oyster resource survey and how that information is being used.

Nancy Hadley and Ben Stone (Shellfish Research) attended the NC Aquaculture Development Conference and toured two NC hatcheries.

Miscellaneous

Staff arranged for the floor in the Shellfish Lab to be stripped and polished. This required not only coordinating with Physical Plant but removing all furniture from the lab and returning it after the floors were finished. Staff have located some rugs and anti-static mats to reduce scratching of the floor in the future.

Statistics:

General Activities

- Delinquent letters for late submission of January mandatory logbooks were mailed on February 15th (153 letters) to license holders for January reports not yet received by the February 10th deadline. The affidavit list which includes delinquent offenders for January and prior months will be generated on February 29th, 2012 (75 offenders) and was turned over to the Law Enforcement Division.
- Several data requests were completed this month including Shellfish, Peeler Crabs, Menhaden, Cobia, and Shrimp catch/effort and landings data. In addition, data for compliance associated with Charter vessels, permitted harvesters, and Wholesale Seafood Dealers was also reviewed and reported.

Commercial Trip Interview Program

- February **sampling efforts provided 34** commercial trips being sampled, with **702** length frequencies with 698 associated age structures being obtained. Additionally, port agents have been sampling finfish that were landed whole by cooperating commercial fisherman in order to obtain values needed to determine if historical conversion factors used to calculate a whole weight from a traditionally landed gutted fish is accurate.

Recreational Statistics Section Summary

- Creel Clerks intercepted 97 fishing parties with a total of 185 anglers interviewed during the month of January 2012. Fish measured included: 50 red drum, 19 spotted seatrout, 7 southern flounder, 12 southern kingfish, 8 sheepshead and 2 Atlantic Croaker.
- Charter boat logbook and recreational fishery dependent data for cobia and spanish mackerel was prepared and submitted for SEDAR 28. Eric Hiltz and Julia Byrd participated in the SEDAR 28 Data Workshop February 6-10 in Charleston, SC.
- SCDNR's saltwater recreational fishing license holder and for-hire license holder data was submitted to NMFS to meet the MOA requirements to remain exempt from the National Saltwater Angler Registry.
- Recreational Statistics Section staff attended the SC Fisheries Workers Association and SC Chapter of the American Fisheries Society meeting February 15-16 on Seabrook Island, SC.
- Julia Byrd and Brad Floyd attended the February Marine Recreational Information Program (MRIP) Access Point Angler Intercept Survey (APAIS) wave meeting February 28 – March 1 in New Orleans, LA.
- The contract with Coastal Carolina University (CCU) to conduct the field work and data entry for the Horry County Pier Survey was finalized. A training workshop was conducted with the 5 CCU students hired to work on the project February 25, 2012 at CCU. Field work will begin March 1, 2012 and training will continue with students in the field through March.
- Additional activities during the month of February included: working closely with commercial seafood dealers to ensure compliance with reporting, assisting DNR's oyster shell recycling program and freezer program, distributing rules & regulations books and fish rulers to coastal businesses as requested.

Finfish Management:

I. SECTION ACTIVITIES

Artificial Reef personnel gave a seminar on conservation and policy related to artificial reef management to College of Charleston graduate students.

II. PROGRAM STATUS REPORTS

Artificial Reef Management and Development

The Artificial Reef Program received nearly a ton of steel material from the refurbishment of the Ronald McDonald House in Charleston. These structures will be placed at the Charleston 60' Reef when R/V Palmetto cruises begin in April. This donation and reef construction was acknowledged at a commemoration ceremony at the Ronald McDonald House on February 16th.

Two buoy inspection flights aboard SCDNR Law Enforcement aircraft revealed eleven (11) missing reef buoys along the SC coast. All missing buoys will be replaced during upcoming cruises.

WILDLIFE AND FRESHWATER FISHERIES

DEPUTY DIRECTOR'S OFFICE:

Key meetings included a Jocassee Stakeholders meeting at Table Rock State Park to gather public input on revisions to the Jocassee management plan, multiple Legislative committee meetings to present and monitor WFF issues, retirement event for Frampton, Aquatic Plant Management Council, Waterfowl Advisory Committee, DNR Board meeting, and a meeting with SC Aquarium to discuss permits for sea turtles. Important issues of concern included changes to deer baiting regulations in Game Zones 1 and 2, timber harvesting and management, and sea turtle permit requirements. Considerable time was also spent discussing budget issues with staff and identifying opportunities to limit agency revenue spending. The wildlife technician meeting and the fisheries biologist meeting was also attended in order to brief the staff on administrative issues and build relationships.

Assistant Deputy Director

Inspected facilities at Samworth WMA with Engineering staff. Spoke with three separate landowners regarding properties for sale in Lancaster, Greenville and Colleton Counties. Examined tract in Colleton with staff. Obtained preliminary approval from DNR Board for two potential land acquisition projects. Investigated request for access easement at Styx. Investigated storm water fees for various DNR properties. Obtained information to complete procurement card audit. Researched Wee Tee acquisition and provided documents to legal staff. Meetings and events attended: DNR Board meeting; Heritage Trust Advisory Board meeting; Jocassee Gorges Management Plan meeting; ACE Basin Task Force meeting; annual staff meeting on bear issues; OSHA workshop; and public inspection period for sale of DNR property in Greenville County.

Public Information Director

Authored and submitted grant application to NSSF; participated in CPM training; continued working on promotion of SCDNR Shooting Day at the Webb; participated in SCDNR Shooting Day at the Webb; continued to work with Checkoff South Carolina on the tax checkoffs; submitted official application for redesign of the endangered species license plate; worked with Responsive Management on finalizing survey and evaluation results for hunting campaign and apprentice license campaign; worked with Responsive Management on development of public draw hunt applicants survey; participated in Rules and Regulation committee meeting; presented at the Wildlife Technicians meeting; met with John Hardee of Lamar Billboards to finalize Classic billboard purchase; participated in Fisheries Coordinators conference call; participated in NBTA conference call; participated in SARP conference call; attended Fisheries Biologist Meeting; continued work on verification of pier and bank access points.

Environmental Programs

Permitting and Review

Staff coordinated 54 DNR reviews (13 COE, 23 DHEC, 13 State Clearinghouse, 5 Misc.) of environmental permits and authorizations for the 38 inland counties. Staff participated in site visits for the proposed Saluda Lake Dredging Project in Pickens County and the Waccamaw Mitigation Bank in Horry County

FERC Projects

Buzzards Roost (Lake Greenwood) Hydro Project (FERC Project No. 1267). DNR staff submitted to Greenwood County a draft 2011 annual report of activities conducted under the Fisheries Resource Enhancement and Mitigation Plan of the Buzzard Roost Project. Staff also provided Greenwood with finalized annual reports for 2008-2010.

Columbia Hydroelectric Project (FERC Project No. 1895). DNR staff participated in annual Fishway meeting (Feb 14) of the licensee and agencies to address 2012 plans for fishway operation and maintenance and related reporting.

Keowee-Toxaway (KT) Hydroelectric Project (FERC Project No. 2503). Relicensing process continues and DNR staff participated in related KT Resource Committee meetings of Recreation, Water Quality, Water Quantity, Wildlife/Botanical, and Shoreline Management on Feb 7, 9, 10, 15 and 16, respectively. DNR staff met on Feb 13 to discuss issues of entrainment study.

Neal Shoals Hydroelectric Project (FERC Project No. 2315). DNR staff provided comments to SCE&G regarding their proposed plan for fish and macroinvertebrate monitoring, which is being done in response to the Oct-Dec 2011 sediment release from Neal Shoals Dam.

Pacolet Hydroelectric Project (FERC Project No. 2621). DNR staff provided comments to Lockhart Power addressing two proposed plans associated with the upper Pacolet hydro: an Avian Protection Plan and a Construction Environmental Protection Plan.

Riverdale Hydroelectric Project (FERC Project No. 13590). Relicensing process continues and DNR staff submitted comments to Lockhart in response to a second Additional Information Requests (AIR) from FERC to

Lockhart Power Company about sediment management issues. Staff also submitted comments to FERC on Scoping Document 1, which identifies issues to be addressed in the Environmental Assessment of the Riverdale hydro project.

Saluda Hydro Project (FERC Project No. 516). DNR staff participated in Striped Bass Flow Adaptive Management Team meeting (Feb 15) to review downstream flows and lake-level conditions of 2011 and to continue developing an annual report template. Staff reviewed SCE&G proposal for land transfer at Bundrick Island to DNR.

Stevens Creek Hydroelectric Project (FERC Project No. 2535). Under the Stevens Creek Mitigation Trust Fund, DNR staff distributed a draft report to SCE&G and resources agencies for review and comment. The report by Jim Bulak, DNR biologist, presents redear sunfish study findings at the Stevens Creek Hydro Project.

NRC Projects

William States Lee III Nuclear Project. DNR staff continued review of the Draft Environmental Impact Statement and Section 404 Permit/401 Water Quality Certification Joint Public Notice and application documents for the William States Lee III Nuclear Project.

WILDLIFE:

Public hunts progressed as planned during the month. Federal Youth Waterfowl Day hunts were held on 10 sites with 61 hunters harvesting 169 ducks. Small game hunting continued to be popular with Bear Island WMA, Donnelley WMA and Botany Bay WMA reporting 314 hunters harvested 130 rabbits, 154 squirrels, 24 snipe and 58 raccoons. At Webb/Palachucola/Hamilton Ridge WMAs, 35 hogs were harvested during 454 hunter days of effort, 9 small game hunters harvested 17 squirrels and 26 raccoon hunters harvested 8 raccoons. 74 hogs were reported harvested from other WMAs. Turkey Tags were distributed during the month.

The State Youth Raccoon Championship was held at Webb WMA with 36 youth participating and a total of 140 people attended the event.

During the month, Webb Center hosted 7 different events/meetings requiring 11 days and 422 participants.

Meeting attended during the month included The National Wild Turkey Federation Technical Committee, The Eastern Management Unit Dove Technical Committee, a statewide wildlife technician meeting was held at SC Waterfowl Association's facility at Camp Woodie, the NBTC Steering Committee, the AFWA Fur Resources Technical Working Group, the SE Deer Study Group, and the Sandhills Longleaf Pine Conservation Partnership meeting was attended. Numerous staff attended OSHA safety training and 17 staff completed pesticide applicators license testing.

Staff participated in a workshop at the National Conservation Training Center to draft a shorebird action plan for the Atlantic Coast.

A well attended Jocassee Gorges stakeholders meeting was held at Table Rock State Park.

During the previous 12 month period ending March 1, 12 permits were issued to communities for deer control in urban areas.

WNS surveillance was conducted through survey of the main tunnel and middle tunnel of Stumphouse Mountain HP with a total of 655 bats observed.

The fawn survival study continued at SRS with 12 does captured and instrumented and 130 coyotes trapped.

Waterfowl banding sites were established with 81 ducks banded during February.

Six bear complaints were handled during the month in Region 1.

A 4-H Range Day was hosted at the Palachucola Range with 85 youth and 65 adults participating.

Six sets of deer antlers were scored.

Fox squirrel restoration at Botany Bay Plantation WMA continued with 3 additional squirrels trapped and translocated during the month.

A coyote management and trapping workshop was conducted for 125 participants.

Region 4 HP staff submitted road construction plans for the re-establishment of Target Road at Lewis Ocean Bay HP to DNR engineering

Botany Bay Plantation WMA use continues to be high with 2,208 visitors recorded for February along with 3 horseback riders.

Management recommendations were provided to 5 landowners, deer data analysis was conducted for 9 hunt clubs and 323 nuisance wildlife investigations conducted (including 29 alligator complaints) requiring 8 site visits. Focus Area coordination required ½ day. Other agencies were provided assistance on 13 occasions requiring 9.25 man/days. Two environmental reviews were conducted. 136 woodduck boxes were checked, one box installed and 84 boxes distributed. 186 bluebird boxes were checked. Presentations were given to 22 groups totaling 1834 people. 8 news

releases were submitted. Surveys conducted during the month included piping plover surveys and a red knot survey. Waterlevel management required 75 man/days. One RCW Safe Harbor site visit was conducted. 1175 acres were surveyed for RCW cavities. Cavity inserts were installed at Sandhills State Forest (7 inserts), Longleaf Pine HP (10 inserts) and Lynchburg Savanna HP (4 inserts). Barn owl boxes were installed at Yawkey and osprey platforms were constructed and installed at Belle Inlet and in Bluffton. 8 man/days were spent on data analysis.

Heritage Preserve activities included 129 site visits. Exotic vegetation control required 93 hours on 11.5 acres at 3 HPs. Agricultural activities included 1 acre mowed, 671 acres burned and 10 miles firelanes disced. 2 miles of roads were scraped. Longleaf pine establishment included 8000 seedlings planted at Long Branch Bay HP and 6000 seedlings planted at Congaree Bluffs HP. GIS maps were developed for historic prescribed fire activities on Woodbury WMA. ¼ mile of boundary was painted at Lynchburg Savanna HP.

Field agricultural activities on WMAs included 38 acres annuals planted, 71 acres mowed, 387 acres disced, 5028 acres burned, 151 acres fertilized, 120 acres limed and 20 acres treated with herbicide. 83 miles of firelanes were disced, 120,140 ft of dike mowed, 2750 feet of dike re-topped, 1 new watercontrol structure installed, 2 miles of roads were mowed, 29.5 miles of roads scraped, 2.9 miles of roads graveled and 1.5 miles of roads were refurbished. 65 WMA signs were erected on 7 miles of boundary. Other signs erected during the month included 20 safety zone signs, 10 road closed signs, 20 HP boundary signs and 35 misc. signs. 20 new gates were installed and 1 gate refurbished. Two parking areas were graveled at Herb Kirsh Conservation Area. 2 miles of roads were graveled at Belfast WMA and 800' of road graveled at Bear Island WMA. 2,650 feet of dike was topped at Bear Island WMA. 900' of new dike was constructed on the Cape as part of the NAWCA project. Nineteen contacts were made with conservation organizations during the month.

FRESHWATER FISHERIES:

Freshwater Fisheries Coordination and Administration (Chief's Office)

Participated in a conference call of the Southeastern Aquatic Resources Partnership.

Attended the Atlantic States Marine Fisheries Commission meeting in Alexandria VA.

Participated in the annual Freshwater Hatchery Staff Meeting at the Webb Center.

Conducted a project inspection at Lake Wallace in Bennetsville.

Participated in a Rules and Regulations Committee meeting.

Meet with resource agencies to discuss potential mitigation proposals for the Lee Nuclear Station.

Conducted a Freshwater Fisheries Section Coordinators conference call to discuss project activities and administrative issues.

Met with State-wide Research Project staff to discuss grants status and time keeping.

Met with USFWS hatchery administrators to discuss the upcoming hatchery season and plan for collaborations to meet fish production goals.

Conducted a conference call with the Natural Resource Trustees associated with the Hartwell/Twelvemile Creek PCB settlement case to prepare for a meeting with Schlumberger to discuss stream restoration actions on Twelvemile Creek.

Started the annual Freshwater Fishery Biologist staff meeting at the Webb Center.

Worked with staff to prepare for the implementation of the Chapter 13 revisions signed into law by the Governor on February 1, 2012.

Region I

Completed fish attractor maintenance on Lakes Thurmond and Russell. Replenished 5 attractors and 2 piers using 180 trees on Lake Robinson and replaced 5 fish attractor buoys.

Completed Lake Keowee fish attractors using 250 trees on 4 bridges, 10 attractors and 2 piers. Two buoys were also replaced.

Completed Lake Hartwell attractors using 170 trees on 10 attractors and 2 bridges. Also replaced 7 buoys

Constructed a fish attractor at Calhoun Falls bank fishing area

Gill netting to monitor striped and hybrid bass was completed on Lake Hartwell

Began updating MSDS sheets for Greenwood and Clemson work centers to comply with OSHA standards.

Finished trout habitat stream structures on Moody Creek

Prepared electrofishing boats for upcoming sampling

Conducted reconnaissance on Rocky River for upcoming WTB sampling

Began aging otoliths from fall sampling

Continued ongoing creel surveys on Lakes Keowee and Greenwood.
Continued conducting stream habitat surveys on Jocassee Gorges streams in conjunction with the SARP/EBTJV Grant and the USFS Challenge Cost-Share agreement.
Continued trout stocking in mountain streams on schedule
Answered numerous questions about the upcoming changes to Chapter 13 regulations
Attended Biologists meeting at the Webb Center
Biologist Houck attended the SCFWA/SCAFS meeting at Seabrook Island
Submitted Lake Greenwood Creel report for review
General office maintenance
Assisted pond owners with technical advice.
Completed draft copy of the 2010-11 annual report
Attended cooperative "Chattooga Coalition" meeting with GADNR, NCWRC, USFS (from SC, GA, NC), TU, and American Whitewater to discuss past and future fisheries management on the Chattooga River.
Attended the Upstate Forever "Forever Green" awards luncheon in Greenville
Attended Trout Stocking Coordination and Planning meeting with Walhalla State Fish Hatchery staff.
Attended OSHA training meeting in Columbia
Attended Keowee-Toxaway FERC Entrainment Study planning conference call meeting with DNR-OEP staff.
Discussed ADA needs at Region 1 Facilities with other Region 1 HUB Coordinators
Attended DNR Fisheries Section Conference call
Toured tailrace areas of Jocassee Hydro on Lake Keowee and Keowee Hydro on Lake Hartwell with USFWS and Duke Energy Staff to discuss entrainment study and tailrace sampling study designs
Attended the SCWF Annual Awards Banquet in Columbia
Attended Region 1 HUB meeting in Clemson
Attended the Annual Fisheries Biologist Meeting at Webb Center in Garnett.

Region II

Region 2 personnel, with assistance from the State Lakes crew, completed the installation of four unframed fish gravel beds in Dargan's Pond, Darlington County.
Personnel deployed 7 new fish attractor marker buoys on Lake Wylie for a cooperative habitat enhancement project with the Lake Wylie Marine Commission/Piedmont Area Stewards (PAWS) group. Two of the six existing fish attractor marker buoys were replaced on Lake Wylie.
Staff replenished 6 fish attractor sites on Lake Wylie with a total of 145 discarded Christmas trees.
Biologist Stroud attended a required OSHA training session at Harbison State Forest, Columbia.
Personnel replaced 5 missing fish attractor buoys on Lake Wateree and replenished five attractor sites with a total of 165 discarded Christmas trees.
Staff assisted the State Lakes crew with installation of fish feeder arm bases at Draper WMA ponds.
Biologist Stroud attended a meeting of the York County Sportsman's Committee to report ongoing work at Draper/Worth Mountain WMA.
Biologist Stroud participated in a Coordinator's conference call during the month.
Biologist Stroud attended an annual biologist's meeting at the Webb Wildlife Center in Garnett, S.C.
Biologist Stroud responded to pond management inquiries from three private pond owners via telephone, email, mail, &/or fax response. No in-house water quality tests were provided to constituents during the month.

Contact with NGOs:

Dr. Bill Jarmin of PAWS regarding a habitat enhancement project on Lake Wylie, S.C.; Tim Whitson concerning pond stocking; Terry Brown regarding pond stocking; Verdis Dixon regarding pond construction and stocking.

Region III

Reservoir Management

Lake Murray striped bass data was entered and analyzed on spreadsheets. Fin clips were delivered to Fort Johnson for genetic analysis.
Age determination for Lake Murray crappie otoliths was conducted
Fish attractor refurbishment continued on Lake Murray. Buoys were deployed to replace missing markers for several attractor locations.
A parking area at Lake Brown was repaired and other needed maintenance situations were identified for future address.

Stream Management

Lower Broad River sampling was conducted to collect fish for the Sportsman's Classic.

Otoliths were extracted from Edisto River redbreast sunfish for analysis as part of the restocking assessment study. Work was done on developing a draft study proposal for the Lower Saluda River.

Trout stocking in the Lower Saluda was completed. Trout Unlimited members were invited to assist in dispersing the fish.

Environmental

Staff attended a meeting to discuss the operations of the Columbia Fishway.

Staff attended an Adaptive Management Team (AMT) meeting to discuss the annual report associated with the "striped bass flows" to be discharged at the Saluda Hydro.

Other

Routine maintenance on boats and equipment was conducted.

Staff attended the 2012 fisheries technicians meeting and the 2012 fisheries biologist meeting.

Project technician participated in a committee organizing the 2013 fisheries technicians meeting.

Burning along the Turkey Creek area of the Barnwell Hatchery was conducted per a request from the City of Barnwell so as to improve the esthetics of the city park.

Staff attended SCFWA/ SCAFS meeting.

Staff met with the agency's geneticist at Fort Johnson to discuss their assistance with future studies to be conducted by the Region.

Staff attended an OSHA training session.

Region IV

Winter gill net sampling was completed by mid February. All data entry was completed and aging was begun on all blue catfish and striped bass samples. All striped bass fin clips were delivered to Dr. Darden's lab for genetic analysis.

Preparations for spring Largemouth Bass sampling were begun on the equipment and sampling schedule.

Project personnel performed striped bass electrofishing sampling of the freshwater section of the Ashley River in coordination with the MRD Mariculture section.

Fish attractor work was conducted on Lakes Marion and Moultrie. F.A.s 4, 11, and 13 were replenished with Christmas trees.

A presentation was made to 40 members of the Daniels Island Inshore Fishing Club on the freshwater pond fishing opportunities available on Daniels Island and the potential for enhancing them.

Chad Holbrook met with DNR Biologist planning Lower Saluda River trout research. Chad's graduate work provided valuable expertise in helping to plan the evaluation of this resource since the new flow regime was instituted.

Project personnel attended the South Carolina AFS/Fisheries Workers Meeting at Seabrook Island.

Youth outreach was conducted with Cross Chapter of Wildlife Action on wood duck maintenance and bluebird box construction.

Project personnel attended OSHA training and John Frampton's retirement party.

10 pond owners were assisted with pond management questions and issues.

Hatchery Coordination

In February, Hatchery staff certified approximately 5,200 grass carp as triploid and issued 3 permits for those fish to be grown or sold in state.

Hatchery staff participated in the monthly Freshwater Fisheries Coordinator Meeting via conference call.

The annual Hatchery and State Lakes Meeting was held at the Webb Center. Staff from all the public hatcheries in the State attended and presented updates.

Staff attended the SC Chapter of the American Fisheries Society Meeting.

Freshwater hatchery staff met with staff from MRD for a pre-production striped bass planning meeting.

Hatchery staff met with USFWS staff to coordinate and draft a hatchery work plan for 2012.

Staff attended the annual Biologist Meeting at the Webb center and delivered a 2011 stocking update to the attendees.

A total of 25,459 trout were stocked during the month of February. Overall fish health remained remarkably well as water flow through the hatchery remained nearly normal due to consistent rainfall.

Staff continued to work on caring for the fry as rearing continues to dominate the production cycle this time of year. Regular stocking started during February and will continue heavily over the next few months.

Outreach

Weekly trout stocking reports continue to be updated on the SCDNR website.

Cohen Campbell Hatchery, Dennis Wildlife Center, Cheraw Hatchery, Walhalla State Fish Hatchery and Spring Stephens Hatchery all reported normal visitation.

An outreach presentation was given to 8th grade participants in the ZooBots program at the Longleaf Middle School.

State Lakes

Attended Tech. Committee meeting, Hatchery/State Lakes Meeting, Coordinators Meeting and OSHA Meeting.

Installed Fish Feeder post and swing arms at Draper WMA.

Had lime delivered to 9 lakes.

Stocked Channel Catfish at Draper WMA and Worth Mtn. WMA.

Installed 44 tons of crush and run gravel and 44 tons of rip-rap to "Duck Lot" at Lake Brown to control erosion.

Held grass contractor walk thru at Lake Ashwood for upcoming grass cutting contract.

Diadromous Fishes

Activities

Efforts this month included: Weekly downloading of acoustic receivers to track sturgeon movements on the Santee, Waccamaw, Pee Dee, Edisto, Combahee, and Savannah Rivers, gillnetting for shortnose sturgeon in Lake Marion, gill netting for American shad in the Waccamaw and Santee Rivers, coordinating with Bears Bluff National Fish Hatchery (BBNFH) concerning continuing Edisto River shad stock enhancement work, monitoring elver ingress at St. Stephen Dam, deploying an elver fyke net at the Goose Creek Reservoir, deploying an acoustic array at Pinopolis Dam, conducting creel surveys for the recreational shad fishery for the Cooper and Santee Rivers and the Rediversion canal, continuing coordination with contractors responsible for construction of an eel ladder for Goose Creek Reservoir. Staff submitted a 5-year proposal to continue diadromous work as it relates to ASMFC mandates and additional edits were submitted for the CWCS. Routine maintenance was also performed on vehicles and boats.

Multi-State Sturgeon Research

Coordination between cooperating states (NC & GA) continue. Field efforts continue weekly. Staff are preparing for up to a 75% cut in funding for year 3 of the project.

St. Stephen Fish Lift

The fish lift began operating the week of February 14th. Fish passage is down from recent years due to drought conditions. Recent rainfall may lead to improved inflows, but that is yet to be determined. Operations have occurred with only 3 hours of turbine activity per day; however Santee Cooper has increased this to one turbine for 24 hours.

To date passage numbers are as follows:

American shad 65,164

Blueback herring 23,140

Santee Accord Sturgeon Lake Study

Field sampling and receiver downloads continue. This month, 12 shortnose sturgeon have been captured and transmitted. Netting will continue year round or until 20 shortnose sturgeon are implanted with transmitters. Staff is preparing gear in efforts of collecting eggs and YOY sturgeon from potential spawning habitat in the Wateree River.

Meetings and Outreach

Personnel participated in numerous conference calls and meetings concerning ASMFC shad and river herring, NMFS protected resources, and the Santee Accord. Staff attended and presented project data at the SCAFS/SCFWA annual meeting in Seabrook Island, SC. Employees attended a meeting to discuss joint activities involving state rivers and lakes with members from USFWS and SCDNR. Personnel also met with the USFWS, SCE&G, Kleinschmidt, and Duke Energy regularly.

Research

Staff gave a paper at the South Carolina American Fisheries Society meeting on "Spring zooplankton in Upper Lake Marion: an unpredictable resource for larval fish." Results indicated that hydrologic conditions can strongly influence development of zooplankton populations in Upper Lake Marion. Zooplankton is an important resource for spawning fishes.

We met with Upstate Forever to discuss the potential ramifications of 3rd Dam removal on the Redeye Bass community of Twelvemile Creek. We presented two lectures to Clemson University classes regarding stream sampling techniques and Twelvemile Dam removal. We presented information regarding the initial impacts of dam removal on Twelvemile Creek fish communities at the SCFWA/SCAFS meeting on Seabrook Island.

We continued development of the Conservation Priority rankings for South Carolina stream fishes to be

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incorporated in the South Carolina Comprehensive Wildlife Conservation Strategy. The ranking method employs measures of statewide abundance and distribution acquired in the South Carolina Stream Assessment (2006-2011) as well as range size and existing conservation status information. We gave a presentation entitled "Assessing conservation priority among South Carolina stream fishes" at the SCFWA/SCAFS meeting on Seabrook Island. We provided freshwater habitat summaries for the revisions to the Habitat section of the Comprehensive Wildlife Conservation Strategy (CWCS). Staff finished CWCS revisions for crayfishes, mussels, snails, and leeches, sorted, identified, and curated invertebrates from the SC stream assessment project, and entered and updated data.

During February eel traps at Wateree and Columbia dams were checked on three dates. One eel was collected at Columbia Dam on 1 February during an electrofishing survey. Routine maintenance of the eel ramps and associated equipment was conducted as needed.

Work continued on the Thurmond striped bass telemetry project. Two person days were spent manually tracking the reservoir for striped bass. Data were downloaded from 25 receivers on seven days. Data collected through December 2012 was processed and imported into our striped bass database. A project summary presentation was prepared for the SCDNR Fisheries Biologist meeting.

Age frequency distributions, based on lake specific age length keys, were developed for three species of fish collected from 10 state lakes during 2007-2009. Overall the lake populations were dominated by young fish. More than 90% of bluegill sunfish and redear sunfish collected were age-3 or less. Ninety percent of largemouth bass collected were age-4 or less. Species mortality rates could not be determined for most lakes due to a lack of age classes and/or insufficient observations within age classes.

Work continued on processing of redbreast otoliths collected from the Edisto River. Otoliths were pulled from 150 fish and approximately 100 have been aged by 2 readers. In the next month we will begin evaluating otoliths for oxytetracycline marks to determine hatchery contribution to a specific age class.

Staff organized the workshop and equipment storage area of the Clemson Research field office.

We attended a listening session held at the U.S. Forest Service Newberry office with USFS representatives and local stakeholders on management of Forest Service lands in South Carolina.

Three anodes were constructed for the jet electrofishing boat. In house construction saved around \$1300 off the purchase price from the manufacturer. Service was also arranged for the Smith-Root electrofishing boat to ready it for the field sampling.

Assistance was provided to the Wildlife Section in the coordination and meal preparation for their annual meeting. OSHA training was attended.

Aquatic Education

Family Fishing Clinics

Worked with graphics to get updated volunteer forms for the Certified DNR Fishing Instructors. Continued to work towards putting together more Teachers' Kits for instructors for the upcoming spring clinics. So far clinics have been scheduled for April 21 at Sergeant Jasper County Park and Sesquicentennial State Park, April 28 at Devils Forks State Park, April 29 at Camp Gravatt, May 19 at Oconee State Park, and June 5th and 7th at Cohen Campbell Fish Hatchery.

Fishing Tackle Loaner Program

Gathered feedback on loaner sites on the data collection efforts to determine that data would be collected on a quarterly basis.

Worked with graphics to update the Fishing Tackle Loaner Flyer for print and updated the website with the webmaster.

SC Reel Kids

Discussions were held to decide what to do about the future of the SC Reel Kids program. Due to the reduction in education staff support, the development of other aquatic education in other areas, and low active participation, it was decided that we would be phasing out the SC Reel Kids program. No new kids will be allowed to sign up for the program; however, those still enrolled will continue to participate until they age out of the program at 16 years old.

Reel Art

Began sorting and collecting Reel Art.

Trout in the Classroom

Prepped aerators and coordinated early stocking dates with stocking locations and fisheries biologists for Irmo Middle School, Palmetto High School, Slater-Marietta Elementary, and White Knoll High School.

Youth Bass Fishing Clubs

Worked with the SC Wildlife Magazine to finalize the article for the March-April issue that just came out.

Made necessary updates with webmaster to include information about the Southeastern Regional tournament provided by FLW/TBF as well as information about the upcoming SC State High School Championship on Lake Greenwood April 27-28 and the TBF of SC Junior Championship on Lake Murray May 19th.

Worked with graphics to finalize a bass fishing brochure for print and recruitment of fishing clubs.

Continued working on development of the Bass Fishing Clubs. Currently, there are 12 schools onboard including Abbeville High, Barnwell County Career Center, Bonds County Career Center, Camden High, Conway High, Dixie High, Dorman High, Greenville Senior High, Ninety Six High, North Augusta Middle, Saluda High, T.L. Hanna High, Waccamaw High and Wilson Hall (private school). Over the past month, four more schools have expressed an interest—Belton-Honea Path High, Chester County Career Center, Aynor High School and Chapin High School.

Other

Attended the Freshwater Fisheries Hatchery Meeting February 7th to present information on the current Aquatic Education programs and efforts.

Attended the Rules & Regulations Committee Meeting February 13th.

Exhibited the Aquatic Education Programs and the 2011 SC Reel Art winners at the Southeastern Wildlife Expo February 16th-19th.

February 8 & 9 continued to collect data on pier and bank fishing access sites across the state with Amanda Stroud for development of the Fish South Carolina publication and photos of each pier and bank access site for the web. We are traveling to all the freshwater pier and bank fishing access sites in the state to collect GPS coordinates and information about the site such as available parking, handicap accessibility, restrooms available, etc. This information will all be compiled into a fishing type atlas for distribution to the public. Data collection and travel takes a while, but we hope to have this project completed within a year's time.

Chapter 13 Outreach & Education

Made the final edits for the Chapter 13 Staff Training Guide that includes fish descriptions and all about the new regulations that will be effective July 2012. This document will serve to train Law Enforcement Officers on the new regs. The guide was also adapted to have an online version that would be available for the public.

Worked with graphics and Amanda Stroud to develop a Chapter 13 informational flyer for distribution at the Palmetto Sportsman's Classic and the regional offices and a sign for boat landings. Worked with videographer, Glenn Gardner, on the development of a small video to highlight the main topics of change in the fishing regulations from Chapter 13 for placement on the Chapter 13 New Fish Regs website and for viewing on the TVs in the Charleston and Columbia licensing office. Worked with Patty Epley and Sam Hahn on development of the Chapter 13 new fish regs website that all the aforementioned publications will display. Other outreach efforts in the works include a media event, a press release, a 1-2 page article in the SC Wildlife Magazine, an eblast and the Chapter 13 display for the Classic.

Law Enforcement

DIVISION SUMMARY – COL ALVIN TAYLOR

Officers issued 413 summons and 1,357 warnings with 665 cases clearing court with fines totaling \$95,372.07 being assessed. A total of 2,745 hours were spent on boating patrols resulting in 4,050 boats being checked. Officers spent 294.5 hours on Homeland Security, 749 hours on litter patrols and a total of 337.5 hours were spent patrolling Heritage Trust Preserve properties. Officers also spent 1,459.5 hours on night patrols. A total of 181 JEA hours were worked.

REGIONS 1 & 2 – MAJ WILLIAM POOLE

Region 1 – CPT Jamie Landrum

Officers issued 129 summons and 303 warnings with 157 cases clearing court with fines totaling \$24,351.61 being assessed. Officers checked 2,715 fishermen, 407 hunters checked and a total of 338 hours were spent on boating patrols resulting in 994 boaters checked. Officers gave a total of 53 public presentations. Officers spent 170 hours on Homeland Security, 291 hours on litter patrols. A total of 54 hours were spent patrolling Heritage Trust Preserve properties. A total of 14 hours were spent patrolling Jocassee Gorges resulting in 2 summonses being issued. Officers also spent 402 hours on night patrols. During the month there was 1 hunting incident reported.

Captain's Spotlight:

- SGT Winegard and CPL Brooking while working youth day for ducks caught 2 subjects hunting a swamp, both subjects were charged with hunting ducks out of season.
- Unit B & C Officers assisted SGT Adams with a youth squirrel hunt at Tyger Ranch in Union County.

Unit 1A (Oconee / Pickens) 1st SGT D.J. Riley

Officers issued 27 summons and 48 warnings with 23 cases cleared court with fines totaling \$4,567.50 being assessed.

- SGT Hedden spent several days this month working the delayed harvest areas resulting in 4 cases being made for possession of trout and illegal methods of taking trout.
- CPL Martin while working a complaint from a land owner discovered illegal traps, resulting in the subject being charged with untagged trap, no written permission and checking traps at night.
- SGT Busha and CPL Martin spent several days working an illegal trot line, subject was caught and charged.

Unit 1 B (Greenville / Spartanburg) 1st SGT Amy Staton

Officers issued 33 summons and 55 warnings with 29 cases cleared court with fines totaling \$3,766.00 being assessed.

- CPL Anders made 1 case for illegal trapping when a neighbor's dog got caught in an untagged trap on a power right of way.
- CPL Jordan responded to a call and charged a suspect with shooting a hawk with a .22 rifle.
- While CPL Jordan was patrolling property watch land, he found a moped by the edge of the woods. After further investigation, CPL Jordan found a suspect inside the wood line manufacturing methamphetamine.
- While on patrol, CPL Holliday saw the buying/selling of a deer mount in progress. CPL Holliday got statements and charged the suspect for illegal sale of deer parts.

Unit 1C (Cherokee / Union) 1st SGT John McCraw

Officers issued 14 summons and 43 warnings with 17 cases cleared court with fines totaling \$1,771.00 being assessed.

- Officer Quinn and Officer Smith worked the T.O.M.O. trailer at a Wild Game Dinner in Cherokee County.

Unit 1D (Greenwood / Laurens) 1st SGT Kristie Lumley

Officers issued 25 summons and 108 warnings with 55 cases cleared court with fines totaling \$9,212.11 being assessed.

- CPL Welch recovered a stolen boat on Boyd's Mill Pond and before the owner had a chance to pick it up, subjects attempted to take the boat again. SGT Cline, CPL Welch and Maxwell caught the subjects.
- CPL Welch worked many night hours checking coon hunter which resulted in 5 contacts for license and trespassing.
- SGT Dudley did a presentation for Ninety-Six elementary school and CPT Landrum, CPL's Welch and Maxwell spoke at Lion's Club in Hickory Tavern.

Unit 1E (Abbeville / Anderson) 1st SGT Rhett Barwick

Officers issued 16 summons and 27 warnings with 22 cases cleared court with fines totaling \$3,630.00 being assessed.

- 1st SGT Barwick worked a hunting incident involving a subject, while squirrel hunting, tripped and shot himself in the foot with a .22 cal rifle. Subject was released from hospital in good condition.
- PFC Ginn answered a call in reference to a boat tied to a dock at a public boat ramp on Lake Hartwell that had sunk. PFC Ginn contacted the owner who stated that her son had gone fishing the night before and hadn't heard from him. When the owner of the boat arrived she recognized the son's truck and boat trailer at the motel at entrance to boat

ramp. PFC Ginn and boat owner knocked on the door of motel room and several people were in the room and stated they had been trying to wake up her son. The son was deceased from a drug overdose. Investigation turned over to Anderson County Sheriff's Office.

- CPL Benseal answered an illegal dumping call at a hunt club and recognized the litter as a Meth dump site. CPL Benseal contacted the Abbeville Sheriff's office who responded and they did a knock and talk at the adjoining residence where with consent from owner located 2 active Meth Labs in a carport. Owner was charged by CPL Benseal for Litter and Trespassing and the Sheriff's office charged subject with Manufacturing Methamphetamine.

Unit 1F (Edgefield / McCormick) 1st SGT Ron Talbert

Officers issued 14 summons and 22 warnings with 11 cases cleared court with fines totaling \$1,405.00 being assessed.

- 1st SGT Talbert, CPL Bridges, PFC's Baker and Cutter worked the TOMO trailer in Edgefield for 60 kids at a wild game supper.
- PFC Cutter wrote a case for catching game fish with a cast net.
- PFC Baker wrote 2 litter cases for dumping. CPL Bridges wrote one case for litter.

Region 2 – CPT Sandy Young

Officers issued 78 summons and 220 warnings with 153 cases clearing court with fines of \$18,879.50 being assessed. Officers checked 480 hunters and 1,672 fishermen, and a total of 442 hours were spent on boating patrols resulting in 688 boats inspected. Officers spent 13 hours on Homeland Security and 219 hours on litter patrols, and a total of 145 hours were spent patrolling Heritage Trust Preserve properties. Officers gave a total of 33 public presentations. Officers also spent 465.5 hours on night patrols. There were 4 boating accidents during the month.

Captain's Spotlight

- CPL Branham and Officer Woodlief worked a commercial fisherman for 2 days before catching the subjects pulling their baskets. The 2 subjects were charged with possession of Game fish with non game device, unmarked baskets and untagged traps.
- 1st SGT Byers and PFC Driggers made 2 cases for hunting turkey out of season.

Unit 2A (Chester, Lancaster, York) 1st SGT Todd Campbell

Officers issued 9 summons and 23 warnings with 32 cases clearing court with fines totaling \$2,915.00 being assessed.

- Officer Plemmons made 1 case for taking birds of prey by means of a pole trap.
- Officer D. Rogers assisted by Officer Vissage made 2 cases on an individual for buying waterfowl. The subject posted an ad on Craig's List wanting to buy all types of mounted animals.

Unit 2B (Fairfield, Kershaw, Lee) 1st SGT Joey Cobb

Officers issued 35 summons and 134 warnings with 66 cases clearing court with fines totaling \$8,393.00 being assessed.

- SGT Stephens charged a subject for having too many rabbit boxes. The subject had a total of 11 boxes.

Unit 2C (Chesterfield, Dillon, Marlboro) 1st SGT John Hillian

Officers issued 6 summons and 14 warnings with 11 cases clearing court with fines totaling \$1,075.00 being assessed.

- CPL Walters and Officer McCurdy each made 2 cases for shining in Dillon County.
- SGT B. Roberts made 1 PFD case on Pee Dee River.

Unit 2D (Darlington, Florence) 1st SGT Benji Byers

Officers issued 14 summons and 33 warnings with 20 cases clearing court with fines totaling \$1,570.00 being assessed.

- PFC Perry and Officer Arnold made several cases for trespassing to trap and untagged traps.

Unit 2E (Marion, Williamsburg) 1st SGT Bill Huggins

Officers issued 14 summons and 16 warnings with 24 cases clearing court with fines totaling \$4,926.50 being assessed.

- CPL's Tanner, McKnight and SGT Kelley caught subjects cutting donuts in an agricultural field. The subjects were charged with open container, possession of marijuana, DUI, and driving on agricultural fields. They were also ordered to Pay Restitution to the land owner.
- Officers Larymore and Oates observed 2 subjects dumping tires on a dirt road next to Little Pee Dee River. The subjects were both charged and convicted with Littering.

REGIONS 3 & 4, INVESTIGATIONS – MAJ CHISOLM FRAMPTON

Region 3 - CPT Harvin Brock

Officers issued 68 summons and 196 warnings with 86 cases clearing court with fines of \$12,000.96 being assessed. A total of 683 hours were spent on boating patrols resulting in 1,094 boaters checked. Officers spent 54 hours on Homeland Security 106 hours on litter patrols and a total of 28.5 hours were spent patrolling Heritage Trust Preserve properties. Officers gave a total of 23 public presentations. Officers also spent 356 hours on night patrols. During the month there were 17 hours spent investigating a boat accident.

Captain's Spotlight

- After working a trap line with numerous steel traps for nearly a month, SGT DeRienzo and CPL Parrish finally caught three individuals working the traps. Their diligence resulted in 15 contacts from violations including untagged traps, no commercial fur harvest license, no written permission from landowner, and not checking traps in a 24 hour period.
- CPL Bassard made 2 undersize striper cases, 1 on Wateree River and 1 on Congaree River. Bassard also apprehended and charged 2 subjects with over limit of shell cracker 70 on Congaree River near Columbia.

Unit 3A (Lexington/Saluda) 1st SGT Ken Simmons

Officers issued 32 summons and 95 warnings with 58 cases clearing court with fines totaling \$8,071.88 being assessed.

- SGT Robinson and CPL Johnson made 1 over the limit and 3 undersize cases on striper fishermen on Lake Murray.
- CPL Johnson investigated a single boat accident on Lake Murray near Rocky Creek with assistance from SGT's Smith, Cope, Barnes and 1st SGT Simmons.
- SGT DeRienzo and CPL Parrish attended the VALOR officer safety training seminar in Columbia.

Unit 3B (Newberry/Richland) 1st SGT Dudley Britt

Officers issued 10 summons and 19 warnings with 4 cases clearing court with fines totaling \$320.00 being assessed.

- CPL Bassard and SGT Bickley worked hard on warrant and suspension notice service. A total of 10 warrants were cleared, 6 by service and 4 to be returned for bad addresses.
- SGT Bannister worked 2 youth hunts, [raccoon and quail] with 46 children participating.
- SGT's Barnes and Cope worked FLW Wal-mart Bass Tournament on Lake Murray in response to citizen complaints regarding wake zone violations.

Unit 3C (Aiken/Allendale/Barnwell) 1st SGT John Bedingfield

Officers issued 8 summons and 24 warnings with 6 cases clearing court with fines totaling \$1,199.08 being assessed.

- Officers Dubose, Terry, Davis and Tyler responded to 2 missing kayakers in the Edisto River who stated that "if they kept paddling they would come back to where they started", they were located safe and cold.
- Officers McDaniel, Salter, Tyler, Terry and 1st SGT Bedingfield attended the Valor Training in Columbia.

Unit 3D (Bamberg/ Calhoun/ Orangeburg) 1st SGT Farrell Pulaski

Officers issued 12 summons and 38 warnings with 10 cases clearing court with fines totaling \$1,280.00 being assessed.

- Unit officers assisted with the search and rescue involving 2 subjects missing on Lake Marion in Berkeley County.
- SGT Yongue apprehended a subject with over the limit of Game fish while patrolling Lake Marion. He also caught a subject trespassing to fish after climbing a fence on a Property Watch pond.
- SGT Herndon assisted with Archery in the Schools program in Bamberg County. He also located two turkey bait sites.
- CPL. Collins gave a presentation on hunting/boating to an RA group in Calhoun County.

Unit 3E (Clarendon/Sumter) 1st SGT Gene Morris

Officers issued 6 summons and 20 warnings with 8 cases clearing court with fines totaling \$1,130.00 being assessed.

- 1st SGT G. Morris worked with CO Jason Smith and CO April Smith on Lake Marion working trotlines and bush lines. CO April Smith was able to issue 1 summons and 5 warnings for trotline violations. CO Jason Smith was able to issue a summons to a commercial fisherman for a trotline violation.
- SGT. D. Morris is assisting the USFW Refuge Agent with ongoing problems on the Refuge in Clarendon County.

Region 4 – CPT Gentry Thames

Officers issued 125 summons and 609 warnings with 254 cases clearing court with fines of \$38,490.00 being assessed. Officers checked 243 hunters and 2,472 fishermen with a total of 1,247 hours being spent on boating patrols resulting in 1,250 boaters checked. Officers spent 57.5 hours on Homeland Security and 133 hours on litter patrols. A total of 110 hours were spent patrolling Heritage Trust Preserve properties. A total of 326 hours were spent on night patrols. Officers gave a total of 43 public presentations. Officers also spent 181 hours on JEA patrols. During the month there were 28 hunting accident investigation hours and 31 boating accident investigation hours conducted.

Captain's Spotlight

- CPL Hutson and PFC Robinson caught 2 people hunting Turkeys over bait and out of season.
- SGT Pop and PFC Beacham assisted NMFS Agent Samuels on an investigation of a commercial fisherman fishing in an area closed to commercial fishing in the Atlantic Ocean. The captain confessed to the officers that he had fished in the MPA and is facing a \$10,000.00 fine in federal charges.

Unit 4A (Horry) 1st SGT Joe Ard

Officers issued 18 summons and 58 warnings with 46 cases clearing court with fines totaling \$5,635.00 being assessed.

- PFC Pardue attended Valor training in Columbia and long gun recertification.
- SGT Prosser and CPL Floyd conducted a TOMO event at Sweet Home Baptist Church.
- PFC Robinson and CPL Hutson took a call on an injured hawk and took it to the Ark Animal Hospital. The hawk is doing well.

- CPL Hutson and PFC Robinson worked with Region 2 officers on Shad and Herring nets, making several cases.
- PFC Robinson assisted SGT Camlin with a boating complaint that resulted in several cases being made.
- SGT Prosser and CPL Floyd conducted a TOMO event at Langston Baptist Church.

Unit 4B (Georgetown) 1st SGT Ryan Williams

Officers issued 17 summons and 19 warnings with 73 cases clearing court with fines totaling \$11,535.00 being assessed.

- 1st SGT Williams, SGT Pop, and PFC Beacham, made 2 cases for possession of marijuana during a shellfish patrol. The officers were observing a popular Public Shellfish area from a hidden location and witnessed 2 women pull up in separate cars to meet and exchange items. The officers approached the women and found marijuana on both subjects and it was believed to be a deal taking place.
- 1st SGT Williams, SGT's Pop, Camlin, and PFC Beacham arrested 2 subjects for drinking in a state park while on shellfish patrol. Upon running the subjects through NCIC one of the subjects was wanted in Horry County for burglary, weapons charges, and drug charges. The subject was also wanted in Virginia on charges.
- CPL's Capps and McClellan caught a subject netting game fish in a Shad net on the Santee River. The fisherman fished his net and then went back to the hill where the officers made their stop and checked the subject. The subject's first response was there is only shad in this boat, but upon the officers search they found a 3 pound largemouth bass wrapped in felt and hidden under the bow of the boat.

Unit 4C (Charleston North/Berkeley) 1st SGT Angus MacBride

Officers issued 50 summons and 216 warnings with 61 cases clearing court with fines totaling \$8,275.00 being assessed.

- CPL's Crawford and McClellan charged and apprehended 2 individuals for over the limit of Shad while fishing in the Tailrace Canal.
- SGT Monnet expended 58 hours on Divisional Training.
- Unit officers expended 350 search and rescue hours in the Francis Marion National Forest and Lake Marion.
- PFC Gilmore and DLEO Alton Fort led a search team in the Francis Marion National Forest that located the remains of a murder victim buried there.
- Unit officers recovered 2 drowning victims after a protracted search of Lake Marion that lasted over 2 weeks.
- CPL Duncan participated in 2 TOMO waterfowl hunts at Kinlaw Plantation this month.

Unit 4D (Charleston South/Dorchester) 1st SGT Lee Ellis

Officers issued 18 summons and 236 warnings with 38 cases clearing court with fines totaling \$4,625.00 being assessed.

- CPL Weaver worked a possible jumper threatening to blow up the Cooper River Bridge.
- CPL Weaver assisted CCSO with the recovery of a vehicle from Penny Creek Boat Landing.
- CPLs Ladue and Whaley worked an illegal trapping incident with pole traps being used to trap hawks.
- CPL Whaley worked a hunting accident in Berkeley County where a subject shot himself in the leg.
- CPL Whaley assisted ICE with the boarding of a commercial long line vessel at Cherry Point in reference to possible smuggling of narcotics.
- SGT Garner conducted several JEA flights this month with Pilot Harris.
- SGT Kinsey worked several evidence recovery dives in Chester County looking for 5 murder weapons.
- Unit officers spent a lot of time this month documenting commercial crab pot violations.
- Unit Officers attended long gun recertification in Columbia.
- 1st SGT Ellis had 4 seniors from Ashley Ridge High School participate in job shadowing this month.
- CPL Brown gave 2 public presentations for Blessed Sacrament School and the USCG Auxiliary this month.
- CPL Brown assisted CCSO with a shots fired call behind a house, the shooter was apprehended.
- CPL Brown made a case for possession of undersized Winter Trout.

Unit 4E (Beaufort/Colleton) 1st SGT Michael Paul Thomas

Officers issued 6 summons and 31 warnings with 18 cases clearing with fines totaling \$5,670.00 being assessed.

- CPL's Henderson and Pope conducted a search and rescue of 2 missing boaters near Trenchards Inlet. The subjects were located unharmed. Officers escorted them back to the landing.
- SGT's Graham and Mears recovered a missing fisherman. The subject had been missing for 21 days.

Unit 4F (Hampton/Jasper) 1st SGT Michael Paul Thomas

Officers issued 16 summons and 49 warnings with 18 cases clearing with fines totaling \$2,750.00 being assessed.

- CPL's Pope and Henderson assisted in the recovery of 2 missing boaters near Trenchards Inlet.
- CPL Pope worked the Southeastern Wildlife Expo at the Officers Association Booth.
- CPL's Priester and Davis worked with SGT Manual and Investigator Thomas to issue summons to an individual for selling a boat and motor without a title.
- CPL Wallace assisted Hardeville PD on a manhunt for a murder suspect.

Investigations - CPT Gary Sullivan

Officers issued 13 summons and 29 warnings with 15 cases clearing court with \$1,650.00 in fines assessed. Ten warrants were served this month. A total of 20 boats were inspected. A total of 32 boating hours were accrued this month. There was 1 boating incident/accident reports submitted and processed. There were 2 boating fatalities this month. There were 5 hours of Homeland Security work conducted. There were 9 maintenance request received. There were 2 zoning requests received and processed. There were 59 Marine Event Permits processed; 2 dive assignments were completed.

Captain's Spotlight

- Investigators are busy preparing for this spring's In-Service Instruction, the upcoming Hunting Incident Investigation Class and the 2012 BSAF Season.
- 2 motors 3 boats and 1 trailer were recovered valued at \$8,620.00

STAFF OPERATIONS – MAJ MARK CAREY

Legislation & Grants – CPT Mike Sabaka

- Attended legislative meetings
- Worked on draft legislation

Records & Technology – Greg Miley

- Number of Summons entered – 944; Number of Warnings entered – 1342
- New suspensions – 39; Suspensions closed – 20
- Current active suspensions – 617
- Daily corrections and re-running SCI and Boating Internet reports to balance sales.
- Mainframe maintenance on existing applications across the agency.

Supply & Equipment – SGT George Dukes

- Completed Float Coat and Bib issue to Education and Investigations.
- Received and issued robotic deer for Region 1. (3 of 4 have been picked up as of this writing)
- Issued Six new Pioneer Patrol boats. Number seven awaiting issue.
- Worked with Marine Theft to trace origin of surplus boats slated for destruction.
- Worked with other Divisions to assess vehicle needs.
- Worked with Fisheries in an attempt to utilize surplus equipment to satisfy their boating needs.
- Worked on Spring Uniform and outboard motor oil orders.
- Distributed Turkey Tags at Styx warehouse.
- Continued repair of systems at Styx Warehouse with Vandy Waller's help including electrical outlets, and phone and fax lines.
- Tractor equipment repair and maintenance.
- Met with Verizon rep. / Jennifer Coleman/Cpt. Sabaka re: inventory tracking solutions.
- Assisted Communications Manager with various on-going projects including Beaufort control station Parler antenna, reprogramming W/T's and radio and blue light repairs.
- Total calls for service logged: 927
- Litter Buster Total Calls:323 Top three counties; Greenville (50); Charleston (48); Richland (47)
- Total calls forwarded to officers 604: Top three call types: Nuisance Wildlife Cal (103); Injured Animal (94); General Information Call (68)
- Warrant activity for February: Statewide started month with 381, added 2, removed 14, ended with: 369

Homeland Security/EMD– SSGT Rick Dye

- Attended State Full Scale initial planning conference
- Attended Hurricane Task Force meeting
- Attended Joint Terrorism Task Force meeting
- Participated in the Catawba exercise dress rehearsal

Communications - Vandy Waller

- Repaired communications equipment as needed. Repaired / reprogrammed 36 wt's, 5 mobile radios, 4 boat radios, 0 base stations, 0 repeaters, 0 phone line tickets to Radio Room, 1 canopy sites. 0 Console problems.
- Fabricated box radio and installed into one new boat for dive team.
- Climbed Parler tower and moved Beaufort control station antenna 15'.
- Assisted SLED in setting up communications for one FNS shipment.

- Worked through Holiday weekend where the power was removed from the building where the Columbia Radio Repeater is located and kept the repeater running on generator from Friday night till Monday morning.
- Used the new Auto Tune software to calibrate 6 boat radios here and 31 Wt's in Clemson.
- Working on interference problem for Little Mountain and Santee repeater with digital interference from out of town.
- Working on tower contracts for Aynor, Pee Dee.
- CM Waller and SGT Dukes transferred radios and completed the TID process and delivered old radios for disposal.

Education – LT Billy Downer

A total of 4 boats were inspected and a total of 3 boating hours were accrued this month. A total of 70 presentations were given to the public.

- 552 students were certified in 23 Hunter Education classes; 115 students were certified in Hunter Education Internet classes; 65 CD-ROMs were mailed and a total of 34 students were certified in Hunter Education CD-ROM classes; and 19 workbooks were mailed and a total of 8 students were certified by workbook.
- 85 students were certified in 4 Boater Education classes; 63 students were certified in Boater Education Internet classes; 9 students were certified in Boater Education Video classes.
- There were 1707 shooters at the Pickens Range and 555 shooters at the Spartanburg Range during the month.

Special Detail/Training – LT Robert McCullough

- **Confiscation Sales:** 1 Calhoun Co **Equipment buy back:** \$ 100.00
- **OGT Activity:** \$1,300.00 payouts / Balance \$24,000.00
- **Property Watch Activity:** 7 signed up for program
- **Media/Special Operations:** Boating fatality on Lake Marion. Retirement dinner for John Frampton. Gun sale in Calhoun Co. Assisted with case for SGT Ryan Williams. Worked on Classic schedule.
- **Training:** Weapons qualification with long guns was done state wide by CPL Cooper and SGT Monnet. Also preparations for spring in-service have been worked on by these Officers.

Aviation - Pilots Bucky Harris, Owen Barker

- 20 flights resulting in 66.8 flight hours
- 16.2 Law Enforcement flight hours
- 2.0 Restricted/Law Enforcement
- 8.2 JEA flight hours
- 32.2 SAR flight hours
- 8.2 Biology flight hours

OUTREACH AND SUPPORT SERVICES

MAGAZINE

South Carolina Wildlife magazine staff continued editing copy for the May-June 2012 issue. Other functions that occurred during this month include:

- Staff received office copies of the March-April 2012 issue, which features articles on the Boykin Spaniel field trials, the impact of bass fishing tournaments at some of the state's high schools, dolphins strand-feeding, the foldingdoor spider, the South Carolina/North Carolina border survey, the Chinese tallow tree, and the watchable wildlife piece on the chuck will's-widow bird.
- Magazine photo staff continued providing photo assistance to the DNR, including covering DNR Director John Frampton retirement celebration, and outside requests.
- Editorial assistant continued fulfilling magazine photo requests, including archiving digital photos, pulling photos/slides/digitals for DNR's graphics and other staff.
- Handled magazine requests from the public and within the DNR. Staff also assisted fulfillment personnel with promotions publications.
- Continued updating magazine issue and magazine/products material on DNR/magazine's website.
- Estimated sales for the month totaled over \$20,552, which includes the magazine subscriptions and Wildlife Shop sales.

NEWS DESK

- 27 phone calls from the public/media requesting information.
- Set up two on cam TV interviews (WSPA-coyotes and WYFF-feral pigs)
- 22 inquiries via Facebook requesting information.
- 12 emails from the public/media requesting information.
- Prepared and edited 29 news releases.

EDUCATION

Jocassee Gorges Education and Recreation

- Appeared on "Your Day" statewide radio show on SCETV Radio to talk about Jocassee Gorges and field listener calls, along with Mark Hall of Wildlife and Freshwater Fisheries Division and Erik Martin of Law Enforcement Division.
- Attended meeting of Lake Jocassee VIP (Volunteer, Improve, Preserve) Day at Devils Fork State Park, along with representatives of Duke Energy, State Parks, Clemson Extension Service and other groups. Cleanup/education date set for Sept. 15 to coincide with statewide Beach Sweep/River Sweep.
- Delivered Jocassee Gorges program at Road Scholar class (formerly Elderhostel) at Clemson University's Youth Learning Institute.
- Participated in conference call as member of Recreation Resource Committee for Keowee-Toxaway Project relicensing.
- Working on Spring/Summer 2012 issue of Jocassee Journal newsletter.
- Fielded inquiries on recreation (roads open/closed, hunting, hiking, backpacking, paddling, etc.) in Jocassee Gorges and mountain region, mailed out newsletters and brochures and added subscribers received from DNR Jocassee Gorges site.

Other

- Represented DNR at Westminster Elementary School (Oconee County) Math and Science Night, along with snakes, gators, turtles, pelts, mounts and skulls.
- Gave wildlife program for Cub Scout pack at Easley First Baptist Church.
- Represented DNR at Liberty High School Career Day with snakes, gators, turtles, pelts and other natural history materials.
- Working with DNR graphics on plastic bags featuring sponsor logos for Upstate National Hunting and Fishing Day at Duke's World of Energy near Seneca in the fall.
- Working with Clemson Forest, Clemson Extension and U.S. Army Corps of Engineers on Water-n-Wildlife Day on Lake Hartwell and the Clemson Experimental Forest Saturday, March 31.
- Helped coordinate and write stories for DNR statewide weekly news package.

- Fielded calls about hunter and boater education and other general phone questions.

Camp Wildwood Update:

- Camp Wildwood Letter with Application and materials sent to all Garden Clubs in South Carolina.
- All 2nd Year and 3rd Year invitations have been accepted. (35 Campers total = 100%)
- Camp Wildwood (1st Year Program) is 23% full which is almost a month ahead of schedule compared to last year.
- Over \$6,000.00 has been received through donations and registration fee for Camp Wildwood 2012.

GRAPHICS

- The Graphics section completed fifty-three jobs in the month of February. Much of this month was spent preparing items for the Palmetto Sportsmen's Classic. Some of these items were displays, signs, and antler scoring materials. There were seven commercial fishing log books completed, eight different types of envelopes, many forms and five posters. We also completed the SCECAP report. The agency spent approximately \$35,440.00 on printing, signs, specialty items and publications this month. This cost is not all state funding but includes grants, nonprofit charitable donations and federal monies as well.

QUALITY MANAGEMENT

- Tested SCI Recreational Licensing and Boating system, reported errors and bugs to SCI in test system.
- Assisted with the testing and training of DNR Licensing and Boating cashiers on the new SCI system.

PALMETTO SPORTSMEN'S CLASSIC

- We have booked 314 vendors exceeding our goal of 300. All of the indoor spaces are sold with a waiting list of a dozen vendors. We have a few 20 x 20 foot spaces remaining outside.
- Due to the great demand in the last few weeks for indoor booth spaces, we have booked the Rosewood building and are moving the seminar stage and chairs into that building. This allowed us to add a dozen more spaces in the back of the Moore.

TECHNOLOGY

Data Base Management and Applications Development. Continued development of financial interface program between SCI and SCEIS for handling licensing and titling transactions. Initiated installation and configuration of Computer-aided Dispatch (CAD) system for Law Enforcement Communications Center that will utilize GIS for incident mapping and dispatch. Continued the development of a multi-state fisheries management database and software for the SEAMAP program. Continued efforts to modify existing Oracle PL/SQL programs and stored procedures to access new data schema that will be implemented with the new licensing and titling system. Continued migration of static data tables from the old tables to the new data schema to reduce the time required for system implementation. Continued to support the geologic carbon sequestration, hydrologic well and geothermal data management projects. Provided continuing support to South Carolina Interactive, agent POS vendor for the DNR licensing program and the Hunter-Boater Education systems. Due to continued staff shortages and demands for the QA/QC and licensing/titling database development, we continued the suspension of the design of internal financial records management system to interface with SCEIS including the telephone and auxiliary credit card billing systems. Performed weekly maintenance and updates to various database and applications programs using the DNR's development framework protocols.

Continued work with the boat titling program and the SCI, POS vendor, to implement and enhance the ImageNow electronic document management system for document and records management. Continued development of a DNR photographic document reference library. Due to scheduling conflicts, continued the suspension of EDMS project with the Engineering office to integrate facilities management records into the system. Continued document scanning and indexing for managed lands, hydrologic well data, law enforcement violations/summons billing and aviation log applications. Provided records management and permanent archival support to the agency using record export and archive process. Added 24,398 images and 11,967 records to the electronic document repository and transferred 10,788 boating records to archive.

Continued the suspension of a major project to standardize all DNR GIS data to SC State Plane coordinate system and to establish web services for enhanced sharing of DNR data with other agencies due to changes in project priority and staff shortages. Continued project to generate Digital Elevation Models (DEMs) and 2-foot contours from county LiDAR data. Provided routine maintenance for Managed Lands, Reservoir and WMA data and applications. Completed processing of LiDAR data for counties captured during the 2010 and 2011 flights. Completed final QA/QC review and

acceptance of LiDAR data for York, Oconee, Anderson, Pickens and York counties. LiDAR data for Lexington and Charleston are in third QA/QC review. Provided GIS database and GPS support to the various agency programs. Completed 2012 project to capture and process LiDAR data for Calhoun, Aiken and Barnwell counties and continued to collect data for Edgefield, McCormick and Abbeville counties. These counties will be evaluated weekly to insure leaf-off conditions continue through data acquisition or they will be suspended until 2013.

Systems and Network Management. Created test server for applications development. Completed deployment of Windows 7 operating system on agency test PCs and upgraded appropriate applications software. Provided configuration changes and enhancements to ImageNow EDMS software following system upgrades. Sent weekly email blast to notify citizens of DNR activities. Added latest security patches and operating system service pack upgrades to agency servers. Completed the conversion of printers to 64-bit drivers. Discovered and removed virus on two DNR computers. Added 13 backup clients in Columbia, Clemson and Charleston. Resolved several network, email and communications issues. Provided data recovery support to the agency including recovery of deleted files and directories for 5 users. Monitored network, email and server security issues. Continued support to county auditors for mainframe access to DNR boating records. Processed mainframe daily transaction requests. Performed routine mainframe and server system maintenance functions. Researched and developed 10 technology procurement requisitions and provided specification, installation and configuration support for DNR staff. Help Desk staff answered 175 trouble tickets and developed specifications for four technology procurements.

GIS Applications and Web Development. Provided GIS and cartographic support to DNR staff including the generation of 6 maps for the WMA, Executive Office, CWCS and other programs. Continued suspension of development of Internet Map Server application for species-based data storage and access because of project priorities. Provided user support for ArcMap and GPS to DNR staff. Posted or updated SC Wildlife, bear, Title 50 freshwater fishing, Palmetto Sportsman’s Classic and other web pages. Completed the design of web pages for an integrated hydrologic/geologic well database application to provide input, editing and analysis of well data. Provided web site support for the SEAMAP, Managed Lands and SC Wildlife Magazine programs. Continued to research the design and implementation of mobile web applications that would not require complete redesign of the DNR web site. Provided routine maintenance of DNR web site including news releases, publications, Board minutes and other agency web pages. Provided routine maintenance of DNR Intranet site. Created 86 new web & intranet pages and updated or modified 311 existing program web pages. Continued enhancement and maintenance of DNR managed lands and reservoir web applications. The DNR web site 189,851 visitors with the agency calendar, rules and regulations and trout book as the most viewed pages. The GIS Data Clearinghouse had 18,738 map files downloaded with LiDAR data (terrains and intensity images), Digital Orthophoto Quarter Quadrangles, Digital Raster Graphics, Digital Elevation Models, hydrography, hypsography, county boundaries, National Wetlands Inventory and geology as the most commonly downloaded data.

Administrative. Tim De Troye continued to work with various state agencies and local governments to increase statewide participation in the GIS Coordination Council. Jim Scurry continues to meet with South Carolina Interactive regarding the design and implementation of the licensing and titling system. Attended the Information Technology Solutions Committee (ITSC) monthly meeting at the Division of State Information Technology.

PURCHASING

PURCHASE ORDER TRANSACTIONS	NUMBER	EXPENDITURES
Purchases, Quotes and Bids	111	\$775,362.27
Blanket Orders	0	\$0
Exempt	3	\$725.40
Sole Source Procurement	2	\$6,225.00
Emergency Procurement	0	\$0
Grant Exemptions	<u>0</u>	<u>\$0</u>
Total	116	\$782,312.68
FPR's	50	\$29,376.68
Check Request	64	\$210,129.29
Minority Vendors	4	\$2,546.96
Procurement Card Purchases		\$281,391.07

RFQ/Bid Awards					Term
Division	Commodity/Service	Requestor	Requisition #	Contracts	Award Amount
WFWF Division	Deliver Sand-Clay	Greg Lynch	5400003892	No	\$ 15,000.00
WFWF Division	Work Pants	Ken Prosser	5400003893	Yes	\$ 8,891.89
OSS Division	Printing	Bryan Kyzer	5400003943	No	\$ 13,790.00
Law Enforcement	Fiberglass Boat	Tim Baxley	5400003941	No	\$ 25,630.00
Law Enforcement	Boat & Trailer	Tim Baxley	5400003897	No	\$ 350,000.00

ENGINEERING

Priority	County	Project Name
1 - Completed Projects	Kershaw	Hwy. 1 Landing - Lugoff (Phase II)
	Laurens	Belfast Archery Range
2 - Under Contract	Charleston	Santee Coastal Blake House
	Laurens	Boyd's Mill Pond Boating Access
	Marion	Shotgun Range at Marsh
	Richland	Bates Bridge Landing Ramp Relocation
3 - Permitting & Design	Aiken	Riverview Park Transient Courtesy Dock Addition
	Allendale	Highway 301 Fishing Access
	Anderson	Dolly Cooper Park Canoe Access
	Anderson	Green Pond Boating Facility
	Colleton	National Estuarine Research Reserve Bank Stabilization
	Dorchester	Bacons Bridge Boat Ramp
	Horry	Bucksport Ramp Renovation
	Horry	Hwy 22 and 17 Boating Facility
	Horry	Rosewood (Socastee) Ramp Repair
	Jasper	Knowles Island Fishing Pier
	Kershaw	Habitat Enhancement
	Laurens	Belfast Restroom Rehabilitation
	Marion	Woodberry Rifle Range
	Pickens	Pickens Range Archery Range & Tower
	Spartanburg	James Thomason Range
	York	SC Hwy 211 Boating Access
4 - Pending Projects	Anderson	Piedmont Access
	Georgetown	Rocky Point Landing
	Horry	Savannah Bluff Ramp Repair
	Jasper	Tuten Landing Resurfacing
	Laurens	Laurens City Park Archery Range
	Laurens	Reedy River Carry Down Access
	Marion	Hwy 301 Ramp Relocation
	Richland	Columbia Canal Fishing Access
Saluda	Chapells Boating Access	

BOATING/LICENSING

Boating Operations February 2012

Basic Business Report

	MTD	Monthly Revenue	(previous ytd)	YTD
Watercraft - New Titles	610	\$7,582.30	\$45,370.00	\$52,952.30
Outboard Motor - New Titles	463	\$4,602.22	\$20,480.00	\$25,082.22
Watercraft - Transfers	1,446	\$8,314.50	\$35,046.00	\$43,360.50
Outboard Motor - Transfers	1,150	\$11,500.00	\$40,640.00	\$52,140.00
Internet Registration Renewals	777	\$7,770.00	\$25,400.00	\$33,170.00
DNR Office Renewals	5,081	\$50,810.00	\$54,490.00	\$105,300.00
Mail Renewals	2,943	\$29,430.00	\$98,850.00	\$128,280.00
Law Enforcement Boating Dollars (Drew's Law)		\$133,697.00	\$516,822.00	\$650,519.00
Active Watercraft Registrations				362,066
Inactive Watercraft Registrations (including dropped records)				288,506
Total number of Watercraft				365,544

Permitted Marine Dealers

Jan. 1, 07 - Dec. 31, 07	318
Jan. 1, 08 - Dec. 31, 08	363
Jan. 1, 09 - Dec. 31, 09	310
Jan. 1, 10 - Dec. 31, 10	286
Jan. 1, 11- Dec.31,11	284
Jan. 1, 12	150

Licensing Operations February 2012

Basic Business Report

	MTD Quantity	MTD Revenue	Last Year MTD Quantity	Last Year MTD Revenue
Resident Hunting Licenses	1,525	\$ 10,800.00	961	\$ 8,001.50
Non-Res. Hunting Licenses	2,123	\$ 83,851.00	1,851	\$ 71,540.00
Total	3,648	\$ 94,651.00	2,812	\$ 79,541.50
Resident Fishing Licenses	7,941	\$ 66,337.00	11,213	\$ 93,167.00
Non-Res. Fishing Licenses	3,161	\$ 52,010.00	3,100	\$ 52,624.00
Total	11,102	\$ 118,347.00	14,313	\$ 145,791.00
Combo. Licenses	411	\$ 13,245.00	348	\$ 11,189.00
3 Yr. Resident Hunt	22	\$ 673.50	5	\$ 129.00
3 Yr Resident Fishing	159	\$ 4,293.00	234	\$ 6,318.00
3 Yr Non-Res Fishing	18	\$ 1,836.00	15	\$ 1,530.00
Lifetime Licenses	684	\$ 13,197.00	524	\$ 8,481.00
L/T Disability Licenses	0	\$ -	3	\$ -
3YearDisability	200	\$ -	186	\$ -

Turkey Tags	779	\$ 0.00	Opens 03-15-12
Antlerless Deer Tags	0	\$ 0.00	Closed 01-01-12
Shrimp Baiting	0	\$ 0.00	Closed 11-08-11

License Agents Numbers and Sales (Month To Date)

LicenseAgents Quantity	Manual	Point of Sale	Internet & Call Center	SCDNR Offices	Totals
	0	507	1	4	512
Total License		11,996	3,255	149	15,400
Total Revenue	\$ 0.00	\$ 141,927.50	\$ 89,219.50	\$ 2,786.50	\$ 233,933.50
% sales to agent type	0.00 %	60.67%	38.1%	1.2%	

NEW POS
AGENTS 0

Commercial License Operations February 2012
Basic Business Report

License Type	Licenses Sold MTD	Licenses Sold Last Month	MTD	\$ YTD	\$ YTD Last Month	\$ MTD
Commercial Saltwater Res	1,150	1,118	32	\$196,008.75	\$27,930.00	\$28,737.50
Commercial Saltwater Non	158	158	0	\$261,675.00	\$47,370.00	\$47,400.00
Commercial Saltwater Total	1308	1276	32	\$457,683.75	\$75,300.00	\$76,137.50
Trawl Res	310	310	0	\$392,390.00	\$38,743.75	\$0.00
Trawl Non	107	107	0	\$32,100.00	\$32,100.00	\$0.00
Trawl Total	417	417	0	\$424,490.00	\$70,843.75	\$0.00
Crabs Res	340	324	16	\$157,859.00	\$20,421.25	\$21,050.00
Crabs Non	17	17	0	\$29,068.75	\$6,000.00	\$0.00
Crabs Total	357	341	16	\$186,927.75	\$26,421.25	\$27,050.00
Shellfish Res	252	243	9	\$100,087.50	\$18,183.75	\$18,900.00
Wholesale Res	272	267	5	\$198,275.00	\$26,690.00	\$27,200.00
Wholesale Non	11	10	1	\$5,500.00	\$5,000.00	\$5,500.00
Wholesale Total	283	277	6	\$31,085.00	\$31,690.00	\$32,700.00
All Commercial Types Res	3861	3631	230	\$1,102,939.00	\$156,000.25	\$160,588.50
All Commercial Types Non	369	356	13	\$614,297.00	\$94,545.00	\$95,825.00
All Commercial Types Total	4230	3987	243	\$1,717,236.00	\$250,545.25	\$256,413.50

WATER REC FUNDS
AVAILABLE CASH AS OF FEBRUARY 29, 2012

REG 1 HUB Balances	WREC	G&F	FY12 Lic Rev	FY12 Fine Rev
Abbeville	83,049.19	23,697.39	3,342.44	625.30
Anderson	40,643.43	136,696.17	10,813.70	2,214.37
Cherokee	193,736.07	151,591.07	8,322.68	913.80
Edgefield	65,573.29	34,397.81	2,918.15	2,066.84
Greenville	99,554.29	99,222.81	8,965.56	3,189.45
Greenwood	78,399.79	43,942.31	5,657.65	998.60
Laurens	107,563.58	45,075.36	4,853.98	5,221.94
McCormick	33,657.19	22,401.25	3,968.33	848.21
Oconee	433,697.72	313,560.91	16,042.78	1,302.55
Pickens	52,765.73	77,788.53	8,355.74	2,483.93
Spartanburg	53,676.04	145,536.96	11,314.13	2,977.90
Union	99,210.15	37,401.61	3,263.49	2,833.78
REG 1 Total	1,341,526.47	1,131,312.18	87,818.63	25,676.67
REG 2 HUB Balances	WREC	G&F	FY12 Lic Rev	FY12 Fine Rev
Chester	162,275.01	50,650.92	3,376.03	4,047.30
Chesterfield	52,766.41	19,623.26	3,691.64	640.99
Darlington	198,249.38	20,335.05	3,253.09	994.44
Dillon	162,820.11	48,072.19	4,526.90	228.90
Fairfield	56,737.51	138,537.77	5,984.30	2,296.83
Florence	412,646.97	50,938.91	3,871.30	794.33
Kershaw	230,135.64	70,514.57	4,434.53	723.61
Lancaster	257,734.45	120,037.80	9,150.90	1,547.78
Lee	105,042.78	13,615.62	2,433.32	708.36
Marion	118,794.42	28,062.51	2,744.59	573.18
Marlboro	98,677.87	27,347.89	3,252.86	486.76
Williamsburg	116,002.98	30,053.05	2,585.27	601.20
York	223,253.42	76,339.09	27,690.75	1,339.55
REG 2 Total	2,195,136.95	694,128.63	76,995.48	14,983.23
REG 3 HUB Balances	WREC	G&F	FY12 Lic Rev	FY12 Fine Rev
Aiken	17,778.84	57,733.02	5,331.40	1,139.27
Allendale	25,994.00	25,077.69	2,491.31	396.38
Bamberg	61,366.62	17,121.84	2,455.51	118.09
Barnwell	87,225.51	37,410.61	2,691.44	1,164.20
Calhoun	70,291.22	37,731.85	2,970.49	1,800.02
Clarendon	68,842.77	54,489.59	7,534.31	3,182.58
Lexington	710,101.31	118,610.88	10,562.81	5,922.72
Newberry	122,060.07	76,966.04	5,780.10	1,726.68
Orangeburg	170,586.28	108,258.14	7,711.73	1,887.92
Richland	328,313.59	99,078.37	11,135.17	2,145.41
Saluda	113,121.51	55,343.36	3,916.33	1,199.97
Sumter	165,200.14	30,359.50	3,526.79	2,595.07
REG 3 Total	1,940,881.86	718,180.89	66,107.39	23,278.31
REG 4 HUB Balances	WREC	G&F	FY12 Lic Rev	FY12 Fine Rev
Beaufort	102,561.37	87,493.74	3,883.03	4,110.82
Berkeley	379,064.74	161,837.00	11,054.92	4,038.53
Charleston	462,184.18	77,873.22	5,934.75	7,553.21
Colleton	97,101.38	56,008.63	3,220.94	2,447.00
Dorchester	268,053.53	33,269.61	3,593.59	681.93
Georgetown	18,626.91	96,795.84	4,252.26	7,304.93
Hampton	89,635.38	58,038.15	2,951.51	852.46
Horry	253,036.41	72,905.95	11,012.89	5,116.99
Jasper	60,396.95	73,126.75	4,024.90	2,199.57
REG 4 Total	1,730,660.85	717,348.89	49,928.79	34,305.44
AVAILABLE TOTAL	7,208,206.13	3,260,970.59	280,850.29	98,243.65

LAND, WATER & CONSERVATION

OFFICE OF DEPUTY DIRECTOR

Ken Rentiers attended the Heritage Trust Advisory Board (2/2) and the Environmental Awareness Award Selection Committee meeting (2/3). Ken met with the Corps of Engineers Savannah District & Georgia EPD (2/6). He attended the Deputy Directors meeting (2/7) and met with Dr. Pat Layton of Clemson University (2/8). Attended the water planning team meeting (2/14) and well cluster monitoring meeting (2/15). He participated in the COE accounting teleconference (2/16). Attended the SCDNR Board meeting (2/17). Participated in the teleconference with Georgia EPD (2/21). He went on the Heritage Trust site visits (2/23). Attended the SCACD Annual meeting and the LWC Advisory Committee meeting in Columbia (2/28-2/29).

HABITAT PROTECTION AND ENVIRONMENTAL CONSERVATION SECTION

River Conservation

Ashley Scenic River Project:

Staff participated in an advisory council meeting of February 16 where the council addressed water quality concerns affecting the Ashley River; and they continued planning the annual Ashley River community education/outreach event for this Spring.

Black Scenic River Project:

Staff remains in email communication with the advisory council addressing ongoing issues with boat ramps and land management activities affecting riparian buffer areas along the river.

Broad Scenic River Project:

Staff provided input to DNR comments on the Draft Environmental Impact Statement of NRC for the Duke Energy proposed Lee Nuclear Station. As mitigation for stream impacts will be required for the nuclear plant, various mitigation options are being explored and discussed among DNR staff.

Catawba Scenic River Project:

Staff and the advisory council met on February 27 to continued developing and writing the Catawba Scenic River management plan.

Edisto River Basin Project:

Staff participated in Friends of the Edisto (FRED) conference call on Feb 27 to address outreach activities and wastewater issue in Batesburg-Leesville.

Lower Saluda Scenic River Project:

Staff met with DNR-Legal to discuss alternatives to address violations of the Saluda River Scenic Easement. Staff provided letter from the advisory council to Lexington County Stormwater expressing support for a county grant proposal to implement a TMDL for fecal coliform on Twelvemile Creek.

Lynches Scenic River Project:

Staff continues to distribute Lynches River water trail guides and address public inquiries concerning travel on the river.

FERC Hydro Projects:

- Buzzards Roost (Lake Greenwood) Hydro Project (FERC Project No. 1267). DNR staff submitted to Greenwood County a draft 2011 annual report of activities conducted under the Fisheries Resource Enhancement and Mitigation Plan of the Buzzard Roost Project. Staff also provided Greenwood with finalized annual reports for 2008-2010.
- Columbia Hydroelectric Project (FERC Project No. 1895). DNR staff participated in annual Fishway meeting (Feb 14) of the licensee and agencies to address 2012 plans for fishway operation and maintenance and related reporting.
- Keowee-Toxaway (KT) Hydroelectric Project (FERC Project No. 2503). Relicensing process continues and DNR staff participated in related KT Resource Committee meetings of Recreation, Water Quality, Water Quantity, Wildlife/Botanical, and Shoreline Management on Feb 7, 9, 10, 15 and 16, respectively. DNR staff met on Feb 13 to discuss issues of entrainment study.
- Neal Shoals Hydroelectric Project (FERC Project No. 2315). DNR staff provided comments to SCE&G regarding their proposed plan for fish and macroinvertebrate monitoring, which is being done in response to the Oct-Dec 2011 sediment release from Neal Shoals Dam.

- Pacolet Hydroelectric Project (FERC Project No. 2621). DNR staff provided comments to Lockhart Power addressing two proposed plans associated with the upper Pacolet hydro: an Avian Protection Plan and a Construction Environmental Protection Plan.
- Riverdale Hydroelectric Project (FERC Project No. 13590). Relicensing process continues and DNR staff submitted comments to Lockhart in response to a second Additional Information Requests (AIR) from FERC to Lockhart Power Company about sediment management issues. Staff also submitted comments to FERC on Scoping Document 1, which identifies issues to be addressed in the Environmental Assessment of the Riverdale hydro project.
- Saluda Hydro Project (FERC Project No. 516). DNR staff participated in Striped Bass Flow Adaptive Management Team meeting (Feb 15) to review downstream flows and lake-level conditions of 2011 and to continue developing an annual report template. Staff reviewed SCE&G proposal for land transfer at Bundrick Island to DNR.
- Stevens Creek Hydroelectric Project (FERC Project No. 2535). Under the Stevens Creek Mitigation Trust Fund, DNR staff distributed a draft report to SCE&G and resources agencies for review and comment. The report by Jim Bulak, DNR biologist, presents redear sunfish study findings at the Stevens Creek Hydro Project.

Other Rivers-Program Staff Activity:

- Palmetto Sportsman's Classic: For the 2012 event, staff coordinated setup and staffing of the LWC-Division booth; and developing public outreach information.
- River Management Society -- Staff participated in a RMS conference calls on Feb 1, 2, 6, 7, 9, and 23 to plan and organize marketing, programming, and sponsorship for the April 2012 RMS symposium to be held in Asheville. Staff contributed a news update on Southeast activities for the RMS Journal.
- State Trails Advisory Committee: Staff coordinated the provision of State funding to support the Southeast Saltwater Trail initiative.
- SC Aquatic Barriers Committee: Staff provided comments to American Rivers regarding project proposals to receive grants from the American Rivers-NOAA Community-based Restoration Program.
- Wateree River/Cowassee Project: Staff wrote article about this project for Outlook Magazine.

Heritage Trust

Data Management:

Information and data requests.

Seven requests for verification of known occurrences in the vicinity of project sites were received and answered from:

- Carolina Gas Transmission, for a gas line replacement project in Aiken County,
- S&ME, Inc. for a proposed natural gas pipeline in the city of Greenville,
- Environmental Corporation of America for telecommunication structure in the town of Martin,
- Carolina Wetland Services for a canoe landing in the City of Rock Hill,
- the SC Army National Guard for four small arms training ranges at the McCrady Training Center in Richland County,
- NatureServe ecologists working to model the South Carolina coastal plain for rare plant occurrences and habitats for ArcMap projects and related information on natural area and rare species inventory of Woodbury WMA and Heritage Preserve,
- and Land Consulting for improvements to the Hilton Head Island Airport in Beaufort County.

Three requests for GIS location data of rare, threatened and endangered species was received and processed from:

- Open Land Trust for data for the Salkahatchie River Basin to update its land preservation priorities,
- The Forestland Group, LLC for data on or in the vicinity of their properties for use in managing those properties,
- and USDA Rural Development office for statewide data to be used internally as part of their funding approval process.

Technical guidance and review.

The SC Army National Guard requested a review of the final draft of their Natural Resource Management Plan for Clarks Hill Training Site in McCormick County. A review continues on the element occurrence records for federally listed plants as part of the federal project to survey those species on SCDNR lands. These records will be adjusted so that similar information is located in the same data fields across all the records, which will make them easier to compare.

In cooperation with volunteers from the SC Native Plant Society, staff assisted with preparing Lisa Matthews Bay for prescribed burning, which will promote the growth of Canby's dropwort (*Oxypolis canbyi*). This effort also included a salvage operation to recover ~60 wiregrass plants from planned fire-break for replanting on a USDA restoration project.

Heritage Survey:

Approximately 52 specimens were processed to include species identification, vouchers listed, and collection numbers assigned for quick reference as collected by the Heritage Preserve Inventory.

Staff met with members and cooperators of the Congaree Land Trust and USFWS to discuss the protection of Carolina bays, their vegetation patterns, rare species, and various land protection strategies available for private land owners and through the federal government and local land trusts.

A survey for quillworts (genus *Isoetes*) was conducted with cooperation from experts from Old Dominion University, the Milwaukee Museum of Natural History, the Smithsonian Institute, and Catawba College at Forty Acre Rock Heritage Preserve. Samples were collected from several ephemeral pools for cytogenetic analysis and DNA sequencing. Tentative field evaluation proposes that there are at least two species indigenous to these pools: *Isoetes melanospora* and *I. piedmontana*. Because hybridization and polyploidization are known to occur in the genus, these initial observations will need to be further evaluated with museum and laboratory work. Forty Acre Rock Heritage Preserve is one of eastern North America's most renowned sites for the study of plant evolution and sympatric speciation; *I. melanospora* is listed as protected under the US Endangered Species Act. In addition, four additional pools of pool sprite (*Amphianthus pusillus*) were documented with population numbers apparently increasing. Woody debris was cleared from the vicinity of the pools, sedimentation issues were documented, and trash was hauled away.

General Assistance:

Preparations were begun for the Sportsman's Classic. Several word find puzzles have been created for LWC sections, and several more are in process. With the assistance of the Graphics Department, they will be a relatively cheap, but professional, way to promote agency work. The COWASEE Basin map was updated with several new conservation easements for use with an article contributed by staff of the SC Scenic Rivers Program.

Aquatic Nuisance Species Program**Technical**

2012 Draft SC Aquatic Plant Management Plan was released for public comments with appropriate public notice in January with comments being compiled and presented to the Aquatic Plant Management Council in a February meeting. The 2012 SC Aquatic Plant Management plan was approved.

Staff presented the 2012 SC Aquatic Plant Management plan to the Board for information and along with that presented the triploid carp stocking number specifically for the Santee Cooper Lakes for approval of the permit for 109,000 carp to be stocked.

ANS staff met with Wildlife staff for surveys and planning of the upcoming (2012) treatments of Donnelly, Yawkey, Santee Coastal, Samworth, and Santee Delta WMAs.

Staff is also currently coordinating with USFWS staff for control work on the Savanna National Wildlife Refuge for invasive and problematic species.

Conversations are ongoing with NRCS staff concerning NRCS funding to private landowners for Chinese tallow control in the Coastal Plain of SC.

2011 treatment records and GIS maps of daily treatments have been finalized.

Collection of winter buds from *Vallisneria* in the Santee Cooper lakes system for propagation to enhance techniques for habitat restoration is ongoing.

Outreach

Public outreach information was distributed in the SCDNR-ANS Booth at the Southeastern Wildlife Exposition in Charleston SC.

ANS Staff attended and presented information at the Fisheries Biologist Meeting at the Webb Center.

Input was provided at the 2012-13 Rules and Regulations Committee meeting.

Work continued on a marketing plan with the fisheries division, Amanda Stroud, development of key chains and measuring cups for aquatic invasive species outreach with funding provided through an existing Federal grant.

Staff attended a SC Aquatic Plant Management Society Board meeting.

Training

Staff attended an OSHA training course

Other

Staff responded to numerous phone calls and emails regarding aquatic weed problems in public waters. Equipment purchases, boat repairs, and vehicle maintenance were performed.

CONSERVATION DISTRICTS

Statewide Projects

The 71th Annual Conservation Partnership Conference was held in Columbia with over 200 conservation district officials, district employees and state and federal agency staff in attendance. S.C. Farm Bureau President David Winkles and DNR Biologist Billy Dukes were among the presenters at the conference. Also presenting on sustaining the family farm were Chester District Commissioner Jeff Wilson and his son J.E.B. The S.C. Association of Conservation Districts (SCACD) presented several awards, including Conservation District Commissioner of the Year to Allen Beer of **Chester District** and District of the Year to the **Greenville District**. SCACD held their annual Legislative Reception and Appreciation event where they recognized Senator Ronnie Cromer and Representative Harry Ott as the Legislator's of the Year. Dorothy Phillips provided assistance for the Land, Water, and Conservation Advisory Committee meeting.

Technical

Under a grant agreement with USDA-NRCS, three Program Coordinators were hired to provide conservation technical assistance. Staff assistance was provided in **Horry, Marion, Florence, Sumter, Aiken, Anderson, Laurens, Orangeburg, Calhoun, Bamberg, Spartanburg and Allendale Districts**.

Outreach

Staff participated in district events in **Laurens, Newberry, Barnwell, and Orangeburg Districts**. **The Envirothon Coaches' Training** was held at the Sandhill Institute Lake House in Pontiac, coordinated by Joy Sullivan. Sixteen high school teachers from across the state attended to training to prepare themselves and their students for the competition scheduled for Friday May 4th. For more information on this year's Envirothon, go to the website at www.dnr.sc.gov/education/Envirothon.

Conservation Districts

Abbeville District is gearing up for the annual bulletin board contest and youth photography contest. Commissioners and staff attended the annual partnership conference where the district coordinator received the district employee of the year award. Commissioners and staff also attended the legislative appreciation dinner in Columbia. The district co-hosted a Feral Hog Workshop. Abbeville District is in the process of studying the feasibility of purchasing hog traps to rent to local landowners to help with the eradication of these nuisance species.

Barnwell District Commissioner Becky Davis and Linda Pickering presented wildlife programs for all 6th grade classes at Barnwell Elementary School for Science Day. Commissioner Sullivan gave a presentation on insects for 18 home schooled students at Double Pond Baptist Church. Chairman Hill presented a program on plants for 25 home schooled children. The district held an Awards Luncheon to honor their 2011 Conservation Farmer of the Year at Edisto Research & Education Center.

Beaufort District staff is working on the spring festivals, including Earth Day events. They are also preparing for World Oceans Day and would appreciate everyone voting for our Clean Marine Debris Project through Grassroots Grant sponsored by Boats US Foundation from March 1 through 15th at their Website: <http://bit.ly/x0X68f> or Facebook: <http://on.fb.me/zXTSJJ>

Berkeley District led a partnership to repair/replace 14 existing and construct 8 new navigation markers on the Cooper River has been completed with the support of many including the Berkeley Conservation Legislative Delegation and SCDNR. The district has inspected the trail heads for 23 trails of the 176 mile Berkeley Blueways Paddle Program replacing trail head signs and updating trail information.

Chester District is very proud to announce that Allen L. Beer, Chairman of the Chester Soil and Water Conservation District, was selected as the 2011 Outstanding Conservation District Commissioner by the SCACD Awards Judging

Committee. Mr. and Mrs. Beer attended the Conference along with Commissioners Wilson and Turner, and District Coordinator Carol Shockley. Commissioner Jeff Wilson and his son, JEB Wilson, presented a very interesting program at the Conference on their fourth generation family farm, Cotton Hills Farms in Chester, South Carolina, and their production and diversification of cotton, corn, wheat, hay, pumpkins, timber, and peaches. During the month of February the Chester District held their annual Essay Contest for sixth, seventh, and eighth graders. Winners were selected from each grade level and monetary prizes were given to each winner.

Georgetown District employees attended a GrowFood Carolina meeting and tour to gain information about their mission and process. The District sent out information to all area schools with essay and photo competition information as well as information on scholarships being offered. Work was completed on the Beach Vitex grant.

Greenville District held their annual oil pan giveaway. One hundred oil pans were distributed to people at transfer stations and the landfill, to encourage recycling of automotive fluids instead of dumping them on the ground or in a storm drain. Each oil pan was accompanied by educational materials. The commission voted to support Trout in the Classroom at Slater Marietta Elementary School and to be a sponsor for the Greenville Organic Foods Organization Urban Farm Tour in May. Three commissioners attended the Partnership Conference and four commissioners attended the legislative dinner.

Greenwood District - The SCACD would like to congratulate Catlin Crowder of Laurens, SC for taking 1st place in the 2011 Conservation Practices Photo Contest for Youth at the National NACD meeting.

Kershaw District is working to place rain gages around the county for measuring rainfall on the national CoCoRaHS system. The district is assisting a Boy Scout Troop with a service project to place DNR's *Stop Aquatic Hitchhikers* signs at all the public boat landings on Lake Wateree.

Lancaster District - Commissioners Ardrey, Bundy, Ghent, Cleveland and Amanda Roberts attended the annual Partnership Meeting. Bill Ardrey received his 35 years of service pin. Ashli Young, FFA Teacher at Andrew Jackson High School was awarded the SCACD 2011 Conservation Educator of the year award. The SC Conservation Districts Employees Association longevity awards were presented to: 10 years of service - Delia Caskey- Jasper; Linda Creel-Greenville; 20 years of service - Nina Warren- Horry; Pat Clark- Dorchester. Commissioner Bob Bundy and District Manager Amanda Roberts judged projects that dealt with natural resources and the District gave awards out for exceptional natural resources projects to six students at the school district science fair. Amanda Roberts, Elizabeth Hunter USDA-NRCS Earth Team Volunteer and SCDNR Law Enforcement officers attended a Job Fair for all 4th and 5th grade students at Kershaw Elementary School. The Cane Creek and Little Lynches Watershed Board had a board meeting to tour all five flood control lakes and to review maintenance on the dams.

Lee District is planning for Kids in Conservation to begin in March and run through May. Applications for Longleaf Pines will be moved to a special program for Longleaf tree planting. Staff is working with producers to install several conservation practices. There are ongoing signups for Organic Initiative and Seasonal High tunnels that runs through May.

Lexington District Manager Bill Melven is working with the Lexington Stormwater Division on a 319 Grant Project involving 12 Mile Creek Watershed. This involves water quality in the rural and urban areas. Bill worked on five pond management problems and attended a Drought training session for instituting the Rain Gauge project. The District is assisting Randy Edwards, Lexington County Engineer, on a problem involving farm land. Bill Melven met with 45 fourth and fifth graders at Congaree Middle School for Career Day. A Tree Care Workshop was sponsored by the district and Lexington County Community Development. Also, the District is planning a Coyote Management Workshop. Bill will assist with a Rain Barrel Workshop that will be sponsored by the Lexington County Public Works and the Lexington Countywide Stormwater Consortium. Tina Blum and her husband attended the Lexington Chamber of Commerce Centerpiece Celebration representing the District. She made an "Earth Burger", the District took second place.

Marion District distributed around 800 trees to Marion County students. The District distributed conservation booklets to 1st -5th grades throughout the County. The essay competition information has been sent to our schools. The Marion District commissioner and staff attended the Conservation Districts Conference.

McCormick District - Over 500 hundred acres of prescribed burning was completed to improve timber stands, enhance wildlife habitat, and reduce wildfire hazard. Preparations were made for Cedar Hill Field Day to be held in April for the McCormick elementary school system. Completed yearly newsletter and mail outs. Preparations are being made for a wild hog class in conjunction with Clemson Extension.

Newberry District is hosting its Annual Soil Sampling Program again this year. The program is in its 12th year and is totally not-for-profit and fully supported by the local landowners and producers. Approximately 500 samples are taken annually by a contracted sampler. The District hosted its Annual Legislative Breakfast for Newberry County. State Legislative guests included: Senator Ronnie Cromer, Representative Walt McLeod, and Representative David Tribble. Newberry County Council Members; City of Newberry Mayor and City Manager; School District of Newberry, Chairman of the Board and other school officials were in attendance as well as Marc Crib, SCDNR. In celebrating the event's 12th anniversary and the grand success of this annual event the District restructured the original program format. Several natural resources conservation presentations were given to schools and clubs. The final steps are underway for their KEEP NEWBERRY COUNTY BEAUTIFUL certification under the Keep America Beautiful affiliate program.

Orangeburg District - Gabby Greenleaves visited the second graders at Vance-Providence Elementary School. Gabby taught the 42 students about birds, mammals, reptiles, invertebrates, and amphibians. The "tree" kept the students wondering what was going to come out of the pockets next! District Commissioner and staff attended the SC SWCS Symposium "Lure of the Longleaf." Orangeburg Commissioners and 2 district employees attended the Conservation Districts Conference.

Pickens District has been focused on contacting public/private schools, churches, and day schools in an effort to increase participation in our annual poster/essay contest. Cheryl Cassell, District Manager, attended TRASH BASH activities at Ambler Elementary and Forest Acres Elementary. Ross Stewart, Soil Conservationist USDA/NRCS, and Cheryl Cassell participated in Career Day at a Liberty High School. Two commissioners were in attendance at the Conservation Districts Conference.

Richland District developed a new District brochure, began a website redesign, and produced an informational display about the Organic Richland program. The District sponsored conservation education programs for 53 people, including 36 students, through the Conservation Station at the Clemson Sandhill REC. In cooperation with the SC Outdoor and Informal Educators, the District initiated the development of a directory of SC environmental education opportunities. Earth Day awards were announced, including teacher mini-grants, a senior scholarship, and Conservation Principal, Teacher, and Student of the Year. Two new Richland County coaches were recruited for the SC Envirothon and attended training with District staff. Staff also judged the Logan Elementary School Science Fair, began planning 2012 Farm-City Week activities, and participated in the SC Soil and Water Society Symposium and the Conservation Partnership Conference.

Spartanburg District staff presented a program for local boy scouts to earn their merit badge in soil & water conservation and presented a wildlife program at the historic Price House for eighty 3rd-5th graders. The District's Youth Board went on a hike to Old Indian Mountain, and also learned how to geocache, a treasure hunt game using GPS.

Union District gave all fourth grade students in Union County trees for Arbor Day. The Bulletin Board contest was held for all 5 elementary schools in Union County. Plans are being made for the 2012 Banquet; and the no-till drill was used for 1021 acres for 2011.

Williamsburg District employee attended a GrowFood Carolina meeting and tour to gain information about their mission and process. The photography, essay and poster contests are underway and the senior award is being offered again this year.

York District began the 2012 Affiliate drive. Staff prepared a flyer for Equestrian Club meeting and NRCS presentation. The District made 10 soils presentations with watershed model demonstration to third graders at Jefferson and Larne Elementary and 7th graders at Castle Heights Middle School, total of 192 students. The District made food chain presentations to 4 classes of third graders at Mount Holly Elementary, total of 88 students. Staff with 3 kindergarten classes (54 students) at Oakdale Elementary in a 6 lesson series to teach about plants, vegetables and prepared to plant a school vegetable garden with them next month. Plans began for the summer conservation workshop for teachers in partnership with Clover School District. All 5 commissioners and one staff attended Partnership Conference and Legislative Dinner. The district sold 7155 square feet of filter fabric to producers establishing heavy use areas and rented no-till drill to 2 new users.

EARTH SCIENCE GROUP

South Carolina Geological Survey

Geological Information

STATEMAP: The 2012 awards were announced, and the award was less than in previous years. The decrease was the result of overall STATEMAP funding being 8% less than 2011. Total distribution by State will be announced in the near future. In Savannah River project work, 57 drill sites have been spotted in Hampton County (Region 4). Twenty-nine (29) holes also were drilled to an average depth of 52 feet.

Outsource Mapping: Field work was focused in the Oil Camp Creek area just to the southeast of Caesars Head State Park, Greenville County (Cleveland quadrangle, Greenville County, Region 1).

Coastal Work: The SAA organizational planning meeting has been set for March 30th. SET stations in the ACE basin were measured, and repairs were made to two stations. Will Doar also gave talk to Central Savannah River Area Geological Society about SET work.

EMD Hazards Map: Map posters were printed (GGMS-5). Copies will be given to EMD for distribution. The accompanying earthquake pamphlet was sent to printers.

Geothermal: Presently, project directions are being reevaluated.

CO₂: The northern margin of the South Georgia rift was reexamined as a result of Triassic red beds being present in the USGS core drilled at St. Stephens Middle School (Berkley County, Region 4), north of the mapped margin. Black and white magnetic information shows an open versus tight pattern to the northeast that is not as discernible on colored images. As a result and after discussions with ESRI colleagues, the northern margin was redefined from stepping off the coast in the vicinity Winyah Bay and is now mapped in the vicinity of Murrells Inlet (Georgetown County, Region 4) to the northeast. Names of drillers also were provided to Mike Waddell to help with the drilling phase of the project. Matt Henderson was hired to work on the CO₂ project.

Broad River Project: The TopCon GPT-1003 was received from Hayes Inc., where it was calibrated and batteries were re-celled. Site visits to the Lockhart Sand Mine on the Broad River and to the Joseph Theo Mine on the Tyger River were made to assess the impact of sediment in the rivers. Reconnaissance was done with Dr. Ray Torres (USC) to find bedrock outcrops in the Broad River Basin. Field sampling methodology from bridges >50 ft above water surface and techniques of surrogate sediment load measurement using turbidity meters were discussed with Celeste Journey (USGS-Columbia). A 3.5 hp Mercury motor was ordered to outfit the canoes. Kerry Castle will attend a USGS Hydroacoustics Sediment Laboratory Symposium in Shepardstown, WV, March 19-23rd. The Neal Shoals sediment issue also continues to be watched.

General: Mr. Doar attended the Region 4 HUB meeting. The drill rig has developed a steady hydraulic leak from the top of the rotary table cylinders; replacement seals are available to repair this use wear-and-tear. Drill crew and geologists attended DNR-WFF OSHA training. Work continues on rearranging the expanded repository. A corner was cleared to make room for a sediment laboratory: a work bench was built, miscellaneous boxes were sorted and labeled containing laboratory equipment, a lab sink was purchased, and water will be run to the sink. Doors and windows also were sealed to prevent water leaks, and the ridge of the old part of the repository was insulated. General Services provided a quote for lighting in the new area and will do the work. General Services also were contacted about fixing septic tank issues; connecting the independent facilities to city sewer lines is being considered. The chain-link fence is being replaced around the area, and holes in the parking lot were repaired.

Digital Products and the Digital Information Program (DIP)

General: Four digital PDF's of out-of-print publications were made available. 32 Publications-Posters- Drafts were plotted on-demand. Office files for 1999-2001 were sorted, and duplicate paper copies were shredded. Text for the Taxahaw product (OFR-5) was located as that work was done. Gilbert 15-minute product (OFR-53) was digitized. Metadata began to be developed for all OFR maps.

STATEMAP: Updating of the Cleveland map (GQM 33) continued. USGS drill logs from the Charleston area also began to be scanned.

Data Preservation: Keyonia Gallman and Matt Henderson continued to scan drill-hole logs, report, and site maps into the Document Management Workflow (532 records). A total of 4533 records now are in the Document Management System; 1408 of those records have been QA/QC'ed.

CO₂: A meeting with CO₂ Project partners discussed our atlas page and two conference calls with the NETL Atlas 4 project.

Geothermal: Final data sets for geophysical logs, earthquakes, documents, and maps were submitted to the Arizona Geological Survey as part of the project's deliverables.

Outreach

General: General information was provided to 32 customers. A word puzzle for SC Geological Survey was completed for the Sportsman Classic, and an advertisement also was developed for the program.

Hydrology Section

Water Planning: Joe Gellici gave an update of water planning efforts to the Land, Water and Conservation Advisory Committee at its February 29th meeting. Section staff also participated in a webinar with representatives from HydroLogics, Inc. to learn about their *OASIS* hydrologic model and its suitability for basin wide surface-water modeling. Staff began to review methods of estimating unimpaired flows, which will be an important component of any future hydrologic modeling efforts.

ADR Network: Approximately 40 Coastal Plain ADR wells were field checked; data were downloaded, manual measurements were made, and equipment checked at each well. A repair was made to one at St. Stephens Middle School (Berkley County, Region 4). Plans are being developed to drill new DNR-owned observation wells in Williamsburg and Lee Counties (Region 4).

Websites and Databases: 331 new well reports that were received from SCDHEC were sorted and processed. Maps showing the locations of wells in Calhoun (Region 3), Dillon (Region 2), and Lee (Region 2) Counties were produced. The *WellTab* database for Hampton County (Region 4) was updated, with 31 new wells being added. A meeting was held with the Geological Survey and SCDNR-IT staff to review and discuss efforts to develop a comprehensive Oracle database containing SCDNR well data.

Savannah River Basin: Staff attended a meeting in Bluffton with representatives of the USA Corps of Engineers, Georgia EPD, SCDHEC, and The Nature Conservancy regarding accounting discrepancies related to work already done for the basin wide study and to resolve funding and scope-of-work issues related to future work. Staff also participated in two conference calls that focused on the same issues and in two conference calls related to the ongoing drought in the Savannah River basin.

Broad River Project: Staff prepared stream current meters and ACDP equipment for use during the project.

FERC: As part of the relicensing of Duke Energy's Keowee-Toxaway project, Scott Harder and Andrew Wachob attended a *CHEOPS* model training workshop and a meeting of the Reservoir Levels and Project Releases Team. Mr. Harder also completed a review of the Water Supply Study report and participated in a meeting of the Operations Scenario Committee.

Mitigation Banks: Mr. Harder reviewed the Carter Stilley Wetland and Stream Mitigation Bank and provided comments and concerns to the Environmental Office.

Outreach: Hydrologic information or assistance was provided to 26 customers.

Flood Mitigation Program

Outreach: Maria Lamm (1) attended the Quarterly *Silver Jackets* Meeting, (2) participated in the DHEC *Blue Ribbon Committee* meeting to answer questions about the National Flood Insurance Program (NFIP) and the possible effects of moving the *OCRM* setback line on flood insurance, (3) processed FY11 funding paperwork, (4) got approval from the State Engineers Office for FY11 program funding, (5) followed-up on Community Assistance Visits (CAVs) for Port Royal (Beaufort County, Region 4) and Myrtle Beach (Horry County, Region 4) in preparation of closing paperwork, (6) participated in *SC Coastal Storm Surge Steering Committee* conference call to address replacing and work distribution as a result of the passing of a member, (7) participated in another conference call with the mapping contractors regarding the CTPFY12 budget, and (8) was involved with the *Region IV Mitigation Planning Training* which provided training on how state and local Hazard Mitigation plans are developed. Joy Sullivan discussed admission into the NFIP, necessary paperwork, and process to follow with the Town of Bowman (Orangeburg County, Region 3); participated in the Cooperative Technical Partners Status call to discuss progress that has been made for the month; and received all Richland County (Region 3) Project Charters and sent them to FEMA for signature. Mmes Lamm and Sullivan manned the Flood Mitigation Program booth at the *2012 South Carolina Association of Conservation Districts Partnership Conference* held in Columbia February 28th, reaching approximately 350 Conservation District staff and stakeholders. They also participated in (1) the Cooperating Technical Partners status call to discuss current progress made in the statewide mapping process; (2) the *Costal Discovery Guidance* Webinar in which FEMA provided updates to the Discovery process of Risk MAP, in which FEMA Region IV is in the process, and procedures to follow; (3) the *Coastal Outreach* Webinar in which FEMA provided updates and information to mapping partners regarding costal outreach, guidelines, and lessons learned; (4) the *Measures 101: Risk MAP Action Measures* Webinar that provided training on how mapping partners are to quantify project goals, measure successes, and report that information to FEMA; and (5) the *Discovery 2012 Webinar* that covered additional information from the Measures 101 webinar. Andy Brandenburg, along with Mmes Lamm and Sullivan, gave presentations on Letter of Map changes, Elevation Certificates, and the mapping and review of the new appeals processes to approximately 50 surveyors at the annual *SC Surveyor's Conference*, held in Columbia February 9th. Mr. Brandenburg made a CAV to North Myrtle Beach (Horry County, Region 4). He also participated in the ICC Meeting conference call with SCEMD and SCDHEC to discuss the state's Hazard Mitigation Plan. Karen Jones followed up with 13 communities on their Community Assistance Telephone Contact process. Ms. Jones, along with Mrs. Sullivan, continued updating Flood Damage Prevention Ordinances with Aiken County (Region 3) and its municipalities with their new map effective June 19, 2012, and with Laurens County (Region 1) and its municipalities with their new map effective August 16, 2012.

Compliance and Ordinances: There were a total of 19 ordinance reviews completed for communities involved with CAV/CACs and upcoming new maps.

Mitigation Activities: Mr. Brandenburg met with community officials of North Myrtle Beach (Horry County, Region 4) to discuss the community's recently, approved planning grant to remove repetitive structure losses from NFIP list.

General: Mrs. Sullivan passed the Certified Floodplain Manager Exam. Staff made 29 updates to the FEMA Community Information System database. In addition, there were 126 general assistance contacts (phone calls and emails). Staff continues preparation for the 2012 Palmetto Sportsmen's Classic: volunteer solicitation is being made, a pull-up banner has been purchased, a full-page ad was placed in the Program, and a word search puzzle is being prepared as a hand-out.

Other Activities:

Dr. Clendenin presented the second of a series of lectures to the Tectonics class at Furman University. He also spent several days helping Brenda Hockensmith do reconnaissance in Williamsburg County to find a suitable cluster site.

Partnering:

Furman University	SCEMD	South Atlantic Alliance – SAA
USGS – Earth Surface Processes Team	SCDHEC-OCRM	University of South Carolina -ESRI
AZ Geological Survey		

STATE CLIMATE OFFICE

The SCO answered 41 information requests with 3 invoiced for \$105 and eleven media interviews were provided. The Assistant State Climatologist for Service assisted SCDNR Law Enforcement with 2 accident investigations and SC Highway Patrol MAIT with one accident reconstruction. He completed a special weather summary for the low temperatures of February 12-13. He worked with the Columbia NWS office to replace Winnsboro's failing temperature sensor. He prepared weather guidelines for the City of Sumter Tennis Center for instructional scheduling by using temperature and relative humidity. He completed a midlands snowfall history for the S.C. Department of Commerce. He coordinated the distribution of 12 CoCoRaHS rain gages to the Lexington Fire Service and conducted a training seminar for the lead Lexington fire service officials (2/1).

The Severe Weather Liaison issued 4 email WeatherAlerts, 1 for winter weather (2/13) and 3 for strong thunderstorms (2/17, 2/22, 2/24). The WeatherAlert Email List Serve has expanded to 1,281 subscribers (Increase from 1,085 in February 2011). He participated in a SCEMD/DOT Conference Call for the potential winter weather event (2/13) and attended the Hurricane Task Force quarterly meeting (2/2). He provided February and March freezing temperature outlooks for the SC Electric Cooperatives. He provided South Carolina's Tornado Climatology to the University of South Carolina's Public Safety Division. He updated South Carolina's County Climate Statistics Atlas (the online update will be available in March). He continued routine web page maintenance for the State Climate Office.

The State Climatologist participated in the monthly SERCC Technical Advisory Committee conference call (2/1), the Carolinas Integrated Science and Assessment (CISA) monthly conference call (2/3), a SC CoCoRaHS recruitment conference call (2/8) and a Catawba Wateree Low Inflow Protocol conference call (2/15). She participated in a public input session (in Charleston on 2/7) for the recent release of the National Fish, Wildlife, and Plant Climate Adaptation Strategy (NFWPCA) and jointly held a SCDNR Climate Change Technical Working Group meeting so staff could participate in a public input webinar for the release of the NFWPCA Strategy (2/22). She provided a Weather Outlook for the west central Peach Growers and Industry (2/23). She provided a Drought Update and Outlook at the Upstate Chamber Coalition Water Summit (2/24). In conjunction with the Columbia National Weather Service, she provided a booth to recruit CoCoRaHS observers at the SC Annual Association of Conservation Districts Annual meeting (2/28). The purpose of the booth was to establish a partnership with the Conservation District community to gain their assistance recruiting volunteer CoCoRaHS observers in each county. The State Climatologist attended a meeting with DHEC staff and the Town of Winnsboro to discuss and evaluate short and long-term solutions for Winnsboro's drought water supply shortage (2/29).